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JARA-NIDANAM

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PROCEEDING OF INTERNATIONAL CONFERENCE

on 19 & 20 November 2021

Theme- Geriatric Diseases-Care and Cure
to Celebrate



jointly organized by

Gujrat Board of Ayurvedic &
Unani System of Medicine &
Parul University

JARA-NIDANAM

Organized by : Department of Roganidan And Vikruti Vijnana
Parul Institute of Ayurved, Parul University.



PROCEEDINGS OF INTERNATIONAL CONFERENCE

THEME-GERIATRIC DISEASES-CARE AND CURE

JARA-NIDANAM

ORGANIZED BY:

**Department of Roganidan and Vikruti Vijnana
Parul Institute of Ayurved, Parul University**



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Proceeding Of International Conference Jara-Nidanam-2021

ISBN: 978-93-5515-100-1

MRP: 1199/-INR

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FOREWORD

I feel honoured to be requested to write the foreword for this excellent work as special add on by the efforts from the Department of Roga Nidana and Vikruti vigyana on conducting Pre International conference Jara Nidanam 2021 under Azadi ka Amrut Mahotsav on 20/10/2021 presiding eminent guest speakers.

I am indeed happy to write a foreword to the book which is combined efforts from the department of Roga Nidana and Vikruti vigyana . It has taken a herculean task to compile this book after referring voluminous literature of past and present with reference to Geriatric practice: cure and care by the scholars. This is a genuine work compiling original references by the authors from Ayurveda and contemporary sciences. The description of pathology with clinical application of the concepts stand unique to this issue. The resources provide comprehensive knowledge about the subject prepared in accordance with the diseases, drugs involved and its etiopathogenesis. Ayurvedic system of medicine has been practiced in the country and globally from time immemorial and has stood the test of many adversities over centuries.

This book of proceedings from the Department of Roga Nidana and Vikruti vigyana will be a timely contribution to students, practitioners, scholars and researchers of ayurvedic medicine. The purpose of this book will be served by the progressive discussions and constructive feedbacks from the readers. I am sure the readers will be benefited immensely by this book. I wish the department to get more such opportunities to convert such intricate subject into an interesting and readable one.

Dr B. G. Kulkarni

M.D., Ph.D. (Rachana Sharir)

Principal & Medical Superintendent

Parul Institute of Ayurved & Research

Parul University



PARUL INSTITUTE OF AYURVED
PRE-CONFERENCE ON GERIATRICS “JARA NIDANAM”
REPORT

A preconference webinar on geriatrics “Jara Nidanam - Diagnostic modalities on geriatric disorders was organised on 20/10/2021 Wednesday 02.00 pm at Parul Institute of Ayurveda, Parul University.

The session the webinar was conducted over online platform [google meet link <http://meet.google.com/mqq-oshj-ejs>].

Webinar on geriatrics was conducted to increase the knowledge about the diagnosis and other aspects related to geriatrics. It helped to improve the knowlegde regarding the jara avastha and its disorders to treat them in better way.

The webinar co-ordinator was Dr. Sunil Ramchandra Khandare, professor, PG PH.D Department of RogaNidana, Parul Institute of Ayurved.

And the guest honour was Dr. Atul Babu Varshney Reader and Head Dept. of RogaNidana SKD Govt Ayurved College Rampur, Muzaffarnagar.

The webinar sessions was engaged by the guest speakers.

1. Dr. Rahul Nair, Associate Professor and Head, Dept Of Roganidanam and Vikrtivijnanam specialist consultant at teaching hospital Ashtamgam Ayurveda Cikitsalayam & Vidyapeedham, Vavanoor, Kootanad Palakkad.

Topic: "senile osteoporosis"

2. Dr. Farseeena k Assistant Professor, Department Of Roganidana, Govt. Ayurveda College, Kannur, Kerala.

Topic : „Ayurvedic Approach In Geriatric Assessment “

This session was very much informative and it incorporated new knowledge in pre-existing.

All the aspects regarding the diagnostic modalities were discussed in this webinar and full text paper were also invited on various topics of geriatrics came into an existence.

All the faculties and PG-PH.D students actively participated in the webinar session and doubt clearing session was very much informative to the faculties and students.

LIST OF GUEST AND SPEAKER



DR. RAHUL NAIR,

ASSOCIATE PROFESSOR AND HEAD, DEPT OF ROGANIDANAM AND
VIKRTIVIJNANAM ASHTAMGAM AYURVEDA CIKITSALAYAM & VIDYAPEEDHAM,
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READER AND HEAD DEPTT OF ROG NIDAN
SKD GOVT AYURVED COLLEGE RAMPUR, MUZAFFARNAGAR

CONTENTS

| SR. NO | TITLE OF ARTICLE | PG.NO |
|---------------|--|--------------|
| 1. | AYURVEDIC APPROACH IN GERIATRIC ASSESSMENT – A REVIEW * Dr. Farseeena K | 13-24 |
| 2. | NIDANA AND PARIHAARA FOR GERIATRICS *Dr. Sree Maruthinandan P.V | 25-28 |
| 3. | GERIATRICS HEALTH CARE IN RESPECT TO MANA AND MANOVAHASROTS * Dr. ANKOLIKA SOLANKI | 29-37 |
| 4. | CLINICAL EXAMINATION IN GERIATRIC DISORDERS | 38-50 |
| 5. | CLINICAL EXAMINATION IN GERIATRIC DISORDERS *Dr. Nimmi A N | 51-59 |
| 6. | NIDANPANCHAKA IN JARA JANYAVYADHI *Dr. Sagar Kumar | 60-66 |
| 7. | AYURVEDA PERSPECTIVE ON NEURO-DEGENERATIVE DISORDERS W.S.R TO FRONTOTEMOPRAL DEMENTIA (FTD) *Dr. Shivaranjani J Kantharia **Prof. Dr. K. B. Patel *** Prof. Dr. SN Gupta | 67-75 |

- | | | |
|------------|--|---------|
| 8. | THE EFFECTS OF GERIATRICS ON MANA WITH REFERENCE OF SATTVAVAJAYA. | 76-81 |
| | *Dr. Pramod R. Kharkar | |
| 9. | LABORATORY INVESTIGATIONS IN GERIATRIC DISORDERS | 82-90 |
| | *Dr. Mayuri Anil Suryawanshi | |
| 10. | ROLE OF TRIDOSHAS IN JARAJANIT VYADHI | 91-95 |
| | *Dr. Hardik Jyani | |
| 11. | A REVIEW STUDY OF ALZHEIMER'S DISEASE AS A JARA ROGA IN AYURVEDA | 96-99 |
| | *Dr. Sushant Dayanand Mhatre | |
| 12. | LAB INVESTIGATION IN GERIATRIC DISORDERS | 100-107 |
| | *Dr. Mahesh Gajanan | |
| | **Dr. Sandip Patil Guide | |
| | ***Dr. Gauri Mulik Hod | |
| 13. | MANOVAHA SROTHOVIKARA IN GERIATRICS | 108-113 |
| 14. | MANOVAHA SROTOVIKARA IN GERIATRICS | 114-120 |
| | *Pavithra G | |
| | **Laxmi. B. Kurle | |
| 15. | CONCEPT OF MANOVAHASRO TO VIKARAIN GERIATRICS | 121-128 |
| | *Dr. Keerti Rotti | |
| | ** Dr. Poornima B | |
| 16. | CONCEPT OF NIDANAPANCHAKA IN JARAJANYAVYADHI | |

*Dr. Sachin N Mahendrakar

**Dr. Raju
Y
Timmapur

- 17. CLINICAL EXAMINATION IN GERIATRIC DISORDERES: SKIN EXAMINATION IN GERIATRIC (XEROSIS IN ELDERELY) 137-143**

*Dr. Rupali Arunrao Tarange

- 18. MANOVAHASROTOVIKARAS IN GERIATRICS 144-146**

*Dr. Athira. Cn

- 19. MANOVAHA SROTA VIKARA IN GERIATRIC DISORDER 147-158**

*Dr. Vaibhav Mishra

- 20. A CONSEPT OF SCHIZOPHRENIA AS A JARA VYADHI**

Dr. Jinal Patel (1st year PG Scholar)

Guided by: Dr. Sandeep Dahilekar

- 21. CLINICAL EXAMINATION IN GERIATRIC DISORDER**

Dr. Nency Vaghasiya- 1st Year Pg Scholar

Guided by: Dr. Sachin Deva

- 22. CLINICAL EXAMINATION IN GERIATRIC DISORDER**

Dr. Maulik Patel- 1st year PG Scholar

Guided By: Dr. Sunil Khandare

- 23. A CONCEPT OF ANIDRA (INSOMNIA) AS A JARA VYADHI**

Dr. Abhinay Agrawal – 1st Year Pg Scholar

Guided By: - Dr. Sandeep G. Dahilekar, Professor

- 24. MANOVAHA SROTOVIKARA IN GERIATRICS**

Dr Adityarajsinh Jadeja 1st year PG Scholar,

Guided by Dr Sachin Deva

- 25. CLINICAL EXAMINATION IN GERIATRIC DISORDER**

: Dr. Kavan Zankatl- 1st year PG Scholar
Guided By: Dr. Sunil Khandare- Professor

AYURVEDIC APPROACH IN GERIATRIC ASSESSMENT – A REVIEW

***Dr. Farseena K**

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Abstract:

In Ayurveda Jara chikitsa is considered as one among Ashtangas, which implies the foresight of Acharyas on its importance. Now the whole world is showing interest in the study of process of aging and aged people. Now a days modern medicine also shows much importance in Geriatrics. This is the best time to explore the possibilities of Ayurveda in Preventive geriatrics and management of geriatric disorders. So before going to the details of treatment, it is necessary to understand the pathophysiology behind aging as per Ayurveda. According to Ayurveda Jara (aging) is a natural phenomenon like hunger, thirst and sleep. In Ayurveda, it is explained that sareera is a combination of Dosha, Dhatu and Mala. So, this review focuses on Ayurvedic approach of the assessment of Jara avastha or geriatric disorders with respect to different changes in the physiological components such as Dosha, Dhatu, Srothas, Mala, Indriyas, Ojas, Manas etc. and exploring the concepts of Vyadhikshamatva, Rogamarga and Dhatu paka with special reference to Geriatrics.

Introduction:

Aging is a multi-dimensional process of physical, physiological and psychological degenerative changes.¹ The branch of medicine concerned with the diagnosis, treatment and prevention of disease in older people and the problems specific to aging is called Geriatrics.² Ayurveda is a science of life and longevity.³ Ayurveda considers Jara or vardhakya as a swabhavaja vyadhi, which is inevitable and natural.⁴ Ayurveda is a holistic science which approaches these issues in a holistic manner. As per Ayurveda, body is made of Tridoshas (Vatha, Pitha and Kapha), Saptha Dhatus (Rasa, Raktha, Mamsa, Meda, Asthi, Majja, and Sukra) and Trimalas (Pureesha, Mutra and Sweda). Human body is explained as living subject which undergoes step by step degeneration as the age advances. As the age

advances the body become weak, digestion and metabolism deteriorate and body is succumbed to a multiple number of diseases.

Aging / Jara avastha:

Jara or Vardhakya is the last stage of human life which ultimately leads to death. As per Ayurveda Jara avastha is the inevitable part of life and is considered as swabhavaja vyadhi (naturally occurring disease).⁴ Acharya Charaka divides the life time as three stages, Balyavastha (young age), Madhyamavastha (middle age) and Jeernavastha (old age).⁵ According to Charaka Acharya vridha avastha is between 60 and 100 years of age.⁶ During Jeerna avastha, there is progressive deterioration of sense organs, vigor, masculinity, bravery, Power of understanding, retaining and memorizing, speech and analysing facts etc. There is gradual decline in the quality and quantity of Dhatu also. Sharngadhara Samhitha explains ten factors which are lost during each decade of life which include childhood, growth, beauty, intellect, health of skin, vision, sexual power, physical strength, wisdom and locomotor activity, which ultimately lead to the loss of life itself.⁷ Since sareera is a combination of Dosha, Dhatu and Mala,⁸ understanding the pathology at its level will help to explore the Jara avastha. No direct references of Samprapthi of jara avastha is available in Ayurveda and so that we have to interpret the pathophysiology of aging from the various concepts explained in various contexts of Ayurveda. When we discuss about the samprapthi of any diseases, we have to consider each and every change occurring at the level of various samprapthi ghatakas. Let us discuss the samprapthi ghatakas one by one. Samprapthi ghatakas include Dosha, Dhatu, Mala, Srothas, Indriya, Ojas, vyadhikshamatva, Manas etc.

Dosha and Jara avastha:

Doshas are the basic constituents of human body, which in normal state support the body and when abnormal lead to various kind of diseases. The status of doshas varies according to age, day, night and food.⁹

As per Charaka acharya the age wise dosha status is as follows¹⁰

| Dosha | Balyavastha | Madhyavastha | Vridhavastha |
|--------------|-------------|--------------|--------------|
| Kapha | +++ | ++ | + |
| Pitha | ++ | +++ | ++ |
| Vatha | + | + | +++ |

It is told that during Balyavastha there is predominance of Kapha dosha, during middle age there is predominance of Pitha dosha and during last stage of life there is predominance of Vatha dosha. Each dosha has five subtypes and each subtype are having specific functions in a normal body. But in aged persons, as there is derangement of dosha, the normal functions of doshas are deranged.

Among three doshas Vatha is the controller of all other doshas, dhatus, initiate all the actions and speech, controls mind coordinates and stimulates all sense organs and maintains the compactness and harmony of all the body organs.¹¹

Following table describes the normal functions of vatha types and their abnormal functions in aged people.¹²

| Type of Vatha | Function | Deranged function |
|-------------------|--|---|
| <i>Prana Vata</i> | Niswasa (breathing), control of budhi, indriya, hridaya, manas, udgara, Annapraveshana | Dyspnoea, Intellectual abnormality, weakness of heart, Diminished functions of sense organs, difficulty in deglutition, frequent belching etc |
| Udana Vatha | Vak pravriti (speech), bala (strength), varna (complexion), smriti (memory) | Speech difficulties, memory loss, intellectual impairment, loss of strength, Discoloration of skin |
| Samana vatha | Anna dharana and pachana (digestive processes), Sarakitta vibhajana | Decreased appetite, weakened digestion, irregular bowel movements |
| Vyana vatha | Sareera gati, srotho vishodhana, asruk sravana etc | Abnormalities of gait, palpitation, improper blood circulation |
| Apana vatha | Excretion of pureesha, mootra, Expulsion of sukra and arthava | Constipation, urinary incontinence, delayed seminal discharge in men, menstrual abnormalities in women |

Following table describes the normal functions of Pitha types and their abnormal functions in aged people.¹³

| Type of Pitha | Function | Deranged function |
|----------------------|---|---|
| <i>Pachaka Pitha</i> | Pachana (Digestion), Sara-kitta Vibhajana | Loss of appetite, Indigestion |
| Ranjaka Pitha | Ranjana (colouring of rasa dhatu) | Anaemia |
| Sadhaka Pitha | Intellectual perception | Loss of memory, depression, Psychosomatic disorders |
| Alochaka Pitha | Visual perception | Visual abnormalities |
| Bhrajaka Pitha | Lustre and imparts smooth texture of skin | Loss of lustre and elasticity of skin |

Following table describes the normal functions of Kapha types and their abnormal functions in aged people.¹⁴

| Type of Kapha | Function | Deranged function |
|----------------------|--|---|
| Avalambaka Kapha | Support heart and other locations of kapha | Cardiovascular problems |
| Tarpaka Kapha | Nourishment of sense organs | Improper function of jnanendriyas (sense organs) |
| Bodhaka Kapha | Taste perception | Abnormalities in taste perception |
| Shleshaka Kapha | Supports and nourishes the joints | Osteoporosis and other locomotor degenerative abnormalities |
| Kledaka Kapha | Anna kledana | Digestive disorders |

Dhatu and Jara avastha

Dhatu is performing a function of deha dharana when it is in a normal state. But Heeyamana dhatu is a state of dhatu in old age. So, theses dhatus are not able to perform their proper functions in aged. Following are the functions of dhatus in normal state and in aged people.¹⁵

| Dhatu | Function | Deranged function |
|--------|--|--|
| Rasa | Tusthi, preenana raktha pushti | Palpitations, tremor, Alpa cheshtayaa srama, valeepalitha, Asradha |
| Raktha | Jeevana, varna prasadaana, mamsa poshana | Decreased lustre and dryness of skin, Sira saithilya, skin disorders |
| Mamsa | Deha lepa, meda pushti | Deblilty of sense organs, dhamani saithilya, weight loss |
| Medas | Netra gaatra snigdhatatah, asthi pushti | Karshya, srama, sosha |
| Asthi | Deha urdhvata, dharana, majja poshana | Disorders of bone, abnormalities of hair and nail |
| Majja | Bala, asthi poorana, sukra pushti | Locomotor abnormalitites, joint disorders, decreased body strength |
| Sukra | Harsha, bala, garbholpadaana | Loss of libido, Pandutva |

Agni and Jara avastha

In Ayurveda 13 types of agni are explained, among which Jataragni is the prime agni. This Jataragni is responsible for all the normal physiological functions in our body. This Jataragni controls other agnis like bhutagni and dhatwagni. Jataragni is the controller of Ayu, varna, bala, swasthya, utsaha, upachaya, Prabha, ojas, tejas and this jataragni itself is Prana.¹⁶ So whenever jataragni is deranged all the connected functions will also be deranged.

As Vatha dosha is physiologically increased in vridhavastha, it also affects Jataragni and results in vishamavastha.¹⁷ It means that there is a fluctuating nature of agni between mandagni and theekshnagni. As we know digestive capacity and metabolic rate are highest in young adults. With advancing age, there is decrease in the metabolic functions. Since in old age all the functions are deteriorated, agni function also get diminished resulting in mainly mandagni which manifests as disorders of metabolism resulting various diseases. This may result in vishamagni janya vikaras like ajeerna, udavartha, adhmana, soola etc. Also, whenever jataragni is not functioning properly it may lead to improper dhatvagni resulting in abnormal dhatu formation. This will ultimately result in abnormal dhatu sara, ojas and dehabala.

Mala and Jara avastha

Mala is also an important constituent of the body, which along with dosha and dhatu maintains the body. Mala is the by-product of ahara pachana, and these are the means through which toxins or impurities are eliminated from the body. Pureesha which is one among trimala is having the function of Avsthambha (imparting support to the body).¹⁵ In old age, since agni is in a deranged state, sara-kitta vibhajana will not take place properly and it may lead to mala kshaya and mala pradoshaja vikaras.

Indriyas and Jara avastha

There are 2 types of Indriyas, karmendriya and jnanendriya. Tridoshas have great influence on the functions of both jnanendriya and karmendriya. Vatha dosha is the controller of all indriyas, vatha is the prakrithi of sparsha and shabda and it is the root of srotra and sparshana. Tarpana of indriyas is the function of Kapha dosha. So, in old age, due to derangement in vatha dosha and depleted state of kapha dosha, it may result in abnormal functions of indriyas which manifests as follows.

Jananendriya hani

Netra (Eye) – Thickening of optic lense, reduced peripheral vision, inability to accommodate (presbyopia), decreased light-dark adaptation.

Srothra (Ear) – high frequency sound hearing loss (presbycusis)

Rasana, ghrana, twak (tongue, nose, skin) – reduced acuity of taste, smell and touch

Karmendriya hani

Vak indriya /Speech – abnormalities of speech, difficulty in speech production, articulation

Pani / Upper extremity – abnormalities of hand coordination and grasp, tremor

Paada/ lower extremity – Abnormalities in coordination, locomotor abnormalities

Payu / excretion – abnormalities in defaecation process (constipation/diarrhoea)

Upastha/ reproduction – loss of libido, impotency etc

Srothas And Jara avastha

Srothas are the functional units of body in which biotransformation and the transport of dhatus take place. When the doshas get vitiated, they will in turn vitiates dhatus and may result in the manifestation of diseases after dosh-dooshya sammurchana. This interaction usually takes place in srothas, as vitiated agni may produce kha vaigunya or srotho vaigunya i.e., impairment of the functional integrity of the srothas. Depending upon the srothas where dosha-dooshya sammurchana takes place, the disease developed may vary.

Ojas, Vyadhikshmatva and Jara avastha

According to Ayurveda, Ojas is the supreme essence of all dhatus. This ojas is responsible for the strength and vitality of the body and resistance of the body against diseases i.e., vyadhikshamatva or immunity.¹⁸ When all the dhatus are properly formed and functioning properly, the body will have natural strength and immunity. But in old age, there is qualitative and quantitative depletion of saptha dhatus and so that the ojas formed will also be vitiated and will be in a state of kshaya or depletion. When we examine the nidanas of ojakshya like kopa, kshut, soka, srama etc all are present in old age and symptoms of oja kshaya like decreased strength, decreased lustre, abnormal mental status etc are evident in old age.

Dhatu sara and Jara avastha

Ayurveda is one of the greatest gifts given by the sages of ancient India to mankind. Ayurveda is designed for healthy and long life. *Agni* (digestive fire), *Prakruti* (constitution), *Dhatusarata* (tissueexcellence), *Doshas* (bioenergies) are the pillars of Ayurveda, which help in diagnosis, treatment and research.

Human physiology depends on balanced state of *Dosha*, *Dhatu* (tissues) and *Mala* (waste materials). Among these, *Dhatus* can be called as stabilizing pillars of the body. Well-nourished *Dhatus* give strength to maintain health and immunity. The strength of body and mind can be evaluated by *Dhatusarata*, which has been specified in *Charak Samhita Viman Sthan* 8th chapter while explaining *Dashavidha Pariksha* (tenfold examination).¹⁹ *Dhatusarata* is qualitative, quantitative and functional assessment of *Dhatus*. Since the status of dhatu in jara avastha is poor, the dhatu sara also will be in pathetic state which will reduce the strength of the individual.

Samhanana and Jara avastha

Samhanana is a unique concept explained by Acharya Charaka in the context of Dashavidha Pareeksha. Investigation of a diseased person is necessary to gather information regarding the span of life, strength and the intensity of morbidity. It is on the basis of intensity of morbidity that the dosage of the therapy is determined and the latter depend upon the strength or the power of resistance of the individual. Therefore the patient should be examined with reference to his prakruti (physical constitution), vikruti (morbidity), sara (excellence of dhatus), samhanana (compactness of organs), pramana (measurement of body organs), satmya (homologation), sattva (psychic constitution), aaharashakti (power of intake & digestion of food), vyayamshakti (power of performing exercise) & vaya (age) in order to ascertain the strength of a person.¹⁸ From these examinations, one can know about the strength and immunity of that particular person. A person is to be examined with reference to his samhanana or compactness of the body. A susamhata (compact) body is characterized by the symmetrical and well divided bones, well-knit joints, well bound muscles and blood. An individual having susamhata (compact) body is said to have uttama bala (good strength) otherwise he is of heena bala (poor strength).²⁰ During old age as there is loss of samhanana of the body which may result in reduction of body strength.

Manas and Jara avastha

Vatha, being the supreme controller of the body not only influences physical and physiological level but also at psychological level, which means it regulates the smooth functioning of Manas or Mind. As this Vatha is vitiated physiologically in old age, it directly or indirectly disturbs the Manas. Manas being the Ubhayatmaka work as relay station in between Cognitive and Conative organs. Most of the psychiatric problems develop due to Alpasatwa. Due to Vata prakopa, satwa

declines with age, leading to decrease in its normal powers of Grahana, Dharana, Vachana, Smarana and Vijnana and susceptibility to other Vikaras by the Doshas such as Pralapa due to Vatha; Manobhramsa - Udanakopa; Bhaya Shoka Dainya - Vata prakopa etc., This accounts for the increasing incidence of dementia, delirium and depression with advancing age.

Ojas also has control over manas. A normal level of *Ojas* is conducive to the proper functioning of mind and the factors which are good for *Manas* will improve *Ojas*. When *ojas* is healthy, the mind is strong and does not easily fatigue. During old age, as *Ojas* is in a depleted stage, mind also get affected.

The emotions like *Bhaya* (fear), *Shoka* (grief), *Lobha* (greed), *Moha* (excessive worldly attachments) also accelerate aging. Various kinds of stress like occupational, financial, family stress etc. may lead to premature aging by lowering body's immunity. Charaka acharya already told that „*Vishaado Rogavardhananam*”²¹ and it is proven that stress aggravates all the diseases. Approximately 15% of adults aged 60 and over suffer from mental disorders.

Rogamarga and Jara avastha

The subject Rogamarga (disease pathway, seat, locale, the channel of diseases) is a unique concept of Ayurveda. Rogamarga can be defined as the actual pathway, mode or manners disease progresses and it plays a vital role in the knowledge of samprapti or pathogenesis. It is also an indication of how the disease is going to take place. Thus, the occurrence, progress and recurrence of a disease depend on Rogamarga. Acharyas explained the rogamarga for the purpose of understanding prognosis of the disease and for the purpose of planning proper management to the disease. Diseases of all the three rogamargas are seen in old age. But their presentation and severity may vary. Diseases of bahya rogamarga are usually minor and uncommon in old age, but madhyama rogamarga diseases are more and with serious complications. Abhyantara rogamarga diseases are also seen due reduced agni and reduced bowel movements. Treatments of each rogamarga diseases vary in their presentation, severity and treatment.

Dhatupaka and Jara avastha

Dhatupaka is a pathological and unfavourable condition to the body in which there is severe tissue destruction and it ultimately leads to serious diseases. When we analyse the symptoms of dhatu paka explained by Acharya Bhavamisra,²² there is immunological challenges, metabolic problems, degenerative issues and

psychological upsets. In most of the geriatric disorders we can see these symptoms of dhatupaka. So, we should consider the concept of Dhatupaka to understand the pathology behind geriatric disorders.

Discussion

Aging is one of the unavoidable processes occurring in each and every living being and one cannot prevent it. Ayurveda mentioned it as a Swabhavika Vyadhi (naturally occurring disease) because risk of developing various diseases increases in old age. During old age there are structural and functional changes at cellular level, tissue level and organ level. Body system undergo changes with age, physiological capacity reduces and the ability to maintain homeostasis in adapting to various stressors decline thereby person becomes more vulnerable to diseases. For understanding the pathology of aging in terms of Ayurveda and formulate an assessment criteria for geriatric patient, needs the analysis of the physiological and pathological changes occurring at the level of Tridoshas, Saptadhatu, Malas, Srotas, Indriyas, Agni, Ojas and Manas. The main Dosha involved is Vata and there is Agnivaishmya leading to improper nourishment of various dhatus of body. There are different patterns of functional deteriorations occurring with aging, which may be gradual and partial functional loss or complete functional loss. The dependent Dhatus also undergo improper nourishment. This process is gradual and leads to irreversible process of aging. When the function of Agni is vitiated, there is improper nourishment of Rasa and successive Dhatus. Finally leads to Shareera apachaya (improper nourishment of body), Oja haani (damages the Ojas) and mano vaikalya.

Conclusion

Increased life expectancy, modern life styles and urbanization lead to a variety of health issues in the area of geriatrics. So geriatric health care should be a prime goal. A complete geriatric health care is only possible through a comprehensive and multidisciplinary approach. Ayurveda has detailed the pathophysiological changes occurring during old age. Its proper understanding is essential for the proper application of preventive geriatrics. Ayurveda is a science of life and hence it explains a way of living for happy and healthy aging, which include practicing proper Dinacharya, Ritucharya, following proper sadvritha, following wholesome diet, and also consumption of Rasayana drugs at proper time. All these things will help to avoid increased risk related to aging.

REFERENCES:

1. Stuart Hamilton, Ian. *The Psychology of Ageing: An Introduction*. London: Jessica Kingsley Publishers, ISBN 1-84310-426-1.
2. Gerald Felsenthal, Susan J Garrison, Franz U Steinberg. *Rehabilitation of the Aging and Elderly patient*. Williams & Wilkins publishers. USA. 1994. p. 499
3. Susrutha, Susrutha samhitha, with the nibandhasangraha commentary by Dalhanacharya and the Nyayachandrikakhya panjika of Sri Gayadasacharya on Nidanasthana, edited by Yadavji Trikamji Acharya. Ed Reprint 2009, Varanasi: Chaukhamba Sanskrit Sansthana. Sutrasthana. 1. Verse 15. p. 21
4. Susruta. Susruta samhita, Vol-I. Srikanthamurthy KR, editor. Reprint ed. Varanasi: Chaukhamba Orientalia; 2012. Sutrasthana, 15. Verse 3.p.97
5. Charaka Samhita of Agnivesa, Ayurveda dipika commentary by Cakrapanidatta, Chaukhambha Orientalia, Varanasi Reprint edition 2015, Vimana Sthana, chapter 8, verse 122, page 280, p 738
6. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Vimana Sthana 8th chapter RogBhishagjitiyavimana-adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 782.
7. Sharangdhara, Sharangadhara Samhita, K R Srikantha Murthy, editor. 5th Edition. Chaukhamba orientalia Varanasi 2003, Poorva Khanda, chap 6, versus 20. p no 30
8. Susruta. Susruta samhita, Vol-I. Srikanthamurthy KR, editor. 1st ed. Varanasi: Chaukhamba Orientalia; 2008. Sutrasthana, 24.p.177-178
9. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana, 1 Verse 23. p.6.
10. Caraka, Caraka samhitha, Vol II Ram Karan Sharma and Vaidya Bhagwan Dash, editors. Reprint. Varanasi: Chowkhamba Sanskrit series; 2018. Vimanasthana 8. Verse 122. p.277
11. Caraka. Caraka Samhita, Vol.1. Shashirekha H K and Bargale Sushant Sukumar, editors.1st ed. New Delhi: Chaukhambha Publications; 2017. Sutrasthana 12. Verse 8. p.196.
12. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana, 20. Verse 2. p.368.

13. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana, 20. Verse 3. p.369.

14. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana 20. Verse 4. p.370.
15. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana, 19. Verse 20. p.350.
16. Caraka, Caraka samhitha, with the Ayurvedadipika commentary by Sri Chakrapanidatta edited by Yadavji Trikamji Acharya. Ed Reprint 2009, Varanasi: Chaukhamba Surbharati prakashan. Chikitsasthana. 15. Verse 3-4. p. 512
17. Caraka, Caraka samhitha, Vol II Ram Karan Sharma and Vaidya Bhagwan Dash, editors. Reprint. Varanasi: Chowkhamba Sanskrit series; 2018. Vimanasthana 6. verse 12. p.189
18. Vagbhata. Ashtanga samgraha, Vol. I. Srikantamurthy K R, editor. 6th ed. Varanasi: Chaukhambha Orientalia; 2002. Sutrasthana, 19. Verse 34. p.364.
19. Caraka, Caraka samhitha, Vol II Ram Karan Sharma and Vaidya Bhagwan Dash, editors. Reprint. Varanasi: Chowkhamba Sanskrit series; 2018. Vimanasthana 8. verse 84. p.84
20. Caraka, Caraka samhitha, Vol II Ram Karan Sharma and Vaidya Bhagwan Dash, editors. Reprint. Varanasi: Chowkhamba Sanskrit series; 2018. Vimanasthana 8. verse 116. p. 271
21. Caraka. Caraka Samhita, Vol.1. Shashirekha H K and Bargale Sushant Sukumar, editors.1st ed. New Delhi: Chaukhambha Publications; 2017. Sutrasthana, 25 verse 40. p.397.
22. Madhavakara. Madhava Nidanam (Madhukosha Sanskrit commentary). Srivijayarakshita, Srikantha Data, editors. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2012. Chapter 2. Verse 66-73. p.45

NIDANA AND PARIHAARA FOR GERIATRICS

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Abstract:

Jara is the stage of living beings who come across the stage of Vruddhavasta and being features such as Greying, Bolded or White hairs, wrinkling of skin, degeneration of senses etc. but, Alteranate science says that the living beings whose age of above the 60 years are categorized to be as Geriatrics. Anyhow, Ageing is a natural inevitable, irreversible, always progressive biological process, associated with decline of physical and mental wellbeings. There are some common diseases which are frequently occur in old age people than in young people. they are, Degenerative disease of heart and Blood vessels, Hypertension, Diabetes etc. Similarly, there are some young people who looks to be an old. Knowingly or unknowingly several nidaanas we will be come across to cause such conditions. There must be a need of management to control these ailments. Hence this paper presenting about the management of such ailments which commonly occur in Oldage.

Introduction:

Ageing is a natural inevitable, irreversible, always progressive biological process, associated with decline of physical and mental well beings. Currently in an india 7.7% of population belongs to the age of above 60Yrs. Geriatric refers to medical care for older adults whose age is above 60Yrs. Jara is the stage of living beings who come across the stage of Vruddhaavasta and being features such as Greying, bolded or white hairs, wrinkling of skin, degeneration of senses etc. we can look at some persons that, by the age of 80Yrs also look to be an Young .. Similarly, there are some young people who looks to be an old. And also there are some

diseases which are frequently occur in old age people than in young people, they are, degenerative disease of heart and blood vessels, Hypertension and Diabetes. This study will be dealing about the causes of such conditions and also deal about management of same.

Materials and methods: Articles, Textbooks, Experts opinion

Body: Year wrinkles the skin, but worry, doubt, fear and anxiety wrinkles the soul. First disease will come across here is.

Degenerative Disease of Heart and Blood vessels: Generally Diet, Heredity, Overweight and emotional strain are the cause for disease. This disease commonly occur at the age of above 40 Yrs. inner walls of Artery breakdown, a lipoid material is deposited, then it replaced by calcium which leads to narrowing of blood vessels. This leads to the diminished blood supply, thrombus formation, Rupture of Blood vessels and high Blood pressure.

Indicated Chikitsa: Sveda, Vamana, Virechana

Pathya Ahara: Vilepi, Raktashaali, Mudga Kulattha Yusha

Pathya Vihaara: Praanayama, Vajraasana

Contra indicated chikitsa: Kshara, Rakthamokshana

Apathya Ahara: Dushta jala, Tikta-Amla rasa dravyas

Apathya Vihara: Ativyayama, Ativyavaya

Hypertension: An estimation prevalence rate of Hypertension in india is about 30%. A condition in which the force of the blood against the artery walls is too high. Usually, its been said to be Hyper when it is above 140/90mm.Hg.

Indicated Chikitsa: Prabhakara Vati, Vircehana, Anuvasana Basti

Pathya Ahaara: Madhura, Amla rasa praadhanya Ahara Pathya Vihaara: Appropriate Vyayama, Praanaayama. Contraindicated Chikitsa: Not found

Apathya Aahara: Katu, Tikta rasa Praadhanya ahara, Apathya Vihara: Krodha, Shoka, Ativyayama, Ativyavaya

Diabetes: is a condition that impairs the body's ability to process blood glucose. Prevalence rate is about 14-15% in india. Its been diagnosed in two ways, that is Fasting blood sugar (FBS) when value is less than 80mg/dl, and Post prondal blood sugar whose value is more than 120mg/dl.

Indicated Chikitsa: Vamana, Svedana

Pathya Ahara: Tikta Rasa Pradhanya Ahara

Pathya Vihara: Praanayama, Vajraasana, Paschimottasana

ContraindicatedChikitsa: Snehapaana (Sthoola) Apathya ahara: Madhura, Amla rasa yulta Ahara Apathya Vihaara: Diwaswapna , Aalasya.

Next condition is about Young people looks to be an old.

Most common cause for this condition is Atichinta, Ati vyayama, Mityaahara-Vihaara,Ativyaavaya,Atikrodha, Atilobha , Arishadvargas in excess, Controlling of Adhaaraneeya vegas, Uncontrolling ofDharaneeya vegas, Not following the Daily rituals , seasonal rituals etc.

Chikitsa : Snehana, Swedana, Shodhana followed by Rasayana chikitsa

Pathya Ahara: Laghu Ahaara such as Puraaatana shaali, Sobanjanaka, Kaaravellaka, Mudga, Kulattha

Pathya Vihaara: nitya abhyanga, Shiropichu, Paadabhyanga, nitryasnaana
Contarindicated Chikitsa: Rookshana therapy, Snehana rahita Shodana Apathya Ahara: Cold items, night leftout food,

Apathya Vihara: Atichinta, Ati vyayama,Ativyaavaya, Atikrodha, Atilobha , Arishadvargas in excess,Controlling of Adhaaraneeya vegas, Uncontrolling of Dharaneeya vegas, Not following the Daily rituals ,seasonal rituals etc.

DISCUSSION:

1. Aging is the uncontrolled process in everyone"s life and geriatric refer to be as medical care for older adults whose age of above 60yrs.
2. Younger age people looks to be an old due to the several nidaanas as said aove.
3. To maintain the youngest thing in us, we must need to follow the rituals which had been mentioned in our samhita.
4. Following the daily rituals such as Dinacharya and Rutucharya as said in Ashtanga Hridaya, like waking up at Bramhi muhurtha etc. and avoiding those food and activities which leads for increase of dosha.
5. Due to Arishadvarga"s Ati guna such as Atikrodha,Ativyaayama, Atilobha etc, disease will get origin.one must control it by Appropriate Vyayama.

CONCLUSION:

By following the Daily rituals, Seasonal rituals, Nitya abhyanga, Rutu anusaara Shodana asper Ashtanga Hridaya one will not get to the Avastha of Jara.

REFERENCE:

1. Dr.Nitesh vyas, Lecturer, Department of Sharira Kriya, SSSB Ayurveda Colege, Kishangarh, Renawal,Jaipur, Rajasthan, India. A Review article on Geriatric care in Ayurveda, June-2016; Vol4 (Issue 06),Pg no 1059-1065.
2. Dr.Arпита Mathur, Lecturer, Department of Sharira Rachana, SSSB Ayurveda Colege, Kishangarh,Renawal, Jaipur, Rajasthan, India. A Review article on Geriatric care in Ayurveda, June-2016; Vol4 (Issue06), Pg no 1059-1065.
3. Dr.Bramhan dutta sharma, Lecturer, Department of Sharira Kriya, SSSB Ayurveda Colege, Kishangarh,Renawal, Jaipur, Rajasthan, India. A Review article on Geriatric care in Ayurveda, June-2016; Vol4 (Issue06),Pg no 1059-1065.
4. Dr.Durgesh nandini, MD Scholar, Department of Sharira Kriya, National institute of Ayurveda, Jaipur, Rajasthan, India. A Review article on Geriatric care in Ayurveda, June-2016; Vol4 (Issue 06),Pg no 1059-1065.
5. Dr.Sankanagoud Patil, An Epidemiological study on Morbidity pattern among Geriatric (Jaravasta) Population residing in the field Practicning area of Primary health care at Bhuvanahalli, Edition1, SDMHassan, 2010.
6. Dr.Prabhakara Rao, Bhaishajya Ratnavali Vol1& 2, Chaukambha Orientalia, 2014 edition, Varanasi.

GERIATRICS HEALTH CARE IN RESPECT TO MANA AND MANOVAHASROTS

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ABSTRACT:

Our life is a time bound phenomena. The man is born, passes to senility, grows to adulthood and ultimately dies. Still longevity and healthy life is the most cherished wish of everyone. In the process of aging there are wide range of environmental factors that accelerates aging process like nutritional deficits, mental stress, climatic changes, free radical injury, immunity, endocrine factors. As the age increases the prevalence of illness increase and life expectancy decreases. Ayurveda has the potential of disease prevention and health promotion in old age. Lifestyle recommendation like Rasayan therapy, Yoga, Good nutrition, (according to asthaaharvidhivisheshayatan, Aaharvidhi vidhan), exercise are unique therapeutic methods to minimise, problems occurring in degenerative phase of one's life. Ayurveda considers the mana to be one of the three pillars on which life depends. Ayurveda offers a holistic approach to mental health that integrates the mind, body and soul. The concept of health in Ayurveda encompasses physical, mental and spiritual health. Mana dushti in old age results in mental retardation due to raja, and tama doshas. Fighting psychological problems in geriatrics is not the sole responsibility of senior citizen alone. The family and the society should have their share of responsibility.

INTRODUCTION TO GERIATICS –

Scholars define ageing as “the sum total of all changes that occur in a living body as the passage of time and leads to decreasing ability to survive stress, functional impairment and death. On an average it is estimated that approx 30 brain cells die per minute. From antiquity to modern times, the urge to live, fear of death, the desire for youth and the quest of rejuvenation have interested mankind. The

concept is related with longevity for those who are naturally long lived as well as retained their vigor.

Geriatrics is merely a complex multifactorial and inevitable process. It is a physiological phenomena result in involuntary changes in mind and body.

Ayurveda quotes Sharir as „Shiryateitishariram“. Our body has the tendency to destroy continuously. In Ayurveda some diseases are described as irreversible and related with prakriti known as swabhavaja vyadhies. Jara is one of them. Jara starts right from the birth and get advancement with chronological age. Everyone has to pass through three cycles decaying changes.

BALYAVASTA- From 0-16 years

TARUNYAVASTHA- From 16-60 years

VRIDDAVASTHA- From 60 years the body elements, sense organs, strength, manhood, velour, memory, energy discrimination began to decay.

In Ayurveda, average age in four yuga is mentioned-

- 1) **KRUTYUG-** 400 YEARS
- 2) **TRETAYUG-** 300 YEARS
- 3) **DRWAPARYUG-** 200 YEARS
- 4) **KALIYUG-** 100 YEARS

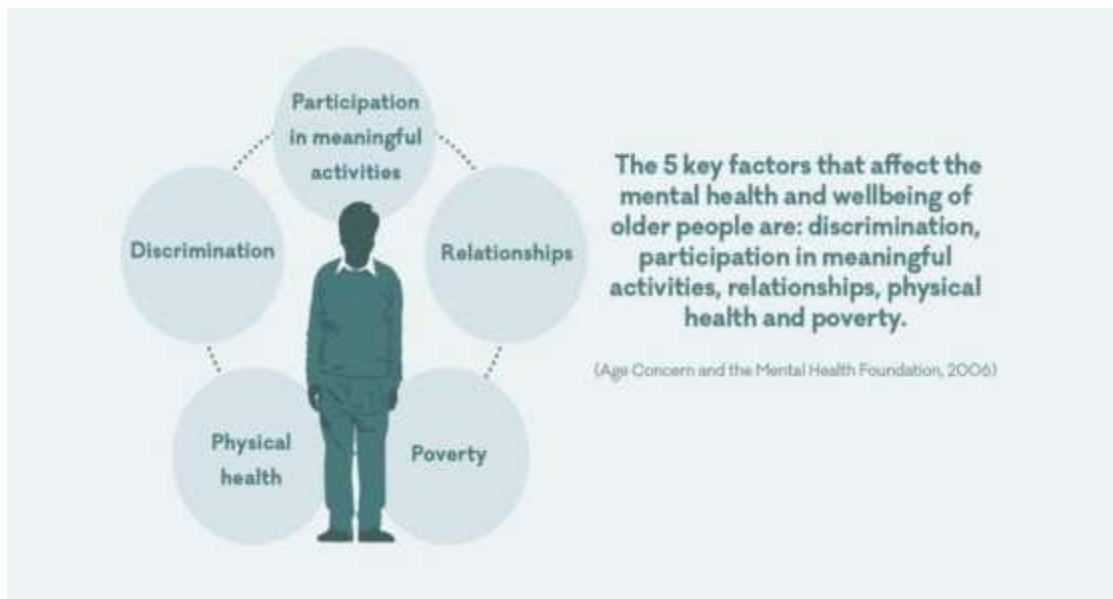
INTRODUCTION TO MANA AND MANOVAHA SROTAS-

The ancient Rishis of India who developed Ayurveda organised their wisdom into three states ie. Physical, mental and spiritual body. Ayurveda defines health as sense of well- being.

मानसः शरीरस्य शरीरस्य च त्रैविध्यं

प्रसन्नात् प्रसन्नचित्तं ततः शरीरस्य शरीरस्य च त्रैविध्यं (ऋ.सू.15/48)

The first half of this verse deals with physiological and anatomical aspects of the body and second half deals with atma, indriya and mana. When these three are prasanna than total health is achieved.



TYPES OF MANA- 3 Satva, Raja and Tama are 3 types of mana.

DOSHAS OF MANA- Raja and Tama are two doshas of mana.

AIMS AND OBJECTIVE-

- Thorough study of mana, manovahasrotas and its dushti.
- Psychological changes during Geriatrics.
- Preventive measures against manovahasrotas dushti and geriatrics.

MATERIAL AND METHOD- MATERIAL-

- Collection of literally work is done from Ayurvedic samhita, Charak Samhita, Sushrut Samhita and chakrapani.
- Various textbooks of modern literature.
- Information collected from relevant internet sites.

METHOD-

CONCEPTUAL STUDY- Theoretical study of changes occurring in geriatrics are studied and correlation of psychological changes or variation with manovahasroto dushti is done. At last listed some preventive aspects to counteract geriatrics changes.

REVIEW OF LITERATURE- Acharya Charak mentioned old age above 60 years, and Acharya Sushrut elaborates the systemic classification of age and described old age above 70 years. Sharangadhar Samhita presents unique sequence of loss of different biological factors during different decades of life as the ageing process.

RASAYAN- Rasayan is the branch of Ayurveda having broad meaning indicating qualitative and quantitative improvement of dosha and dhatus. The main utility is in functional and degenerative disorders that have a chronic nature.

With taking reference to Acharya Sharangdhar- A monograph prepared by K.N. Udupa and RH Singh-

| Age in | Decline Biovalues | Rasayan |
|---------|----------------------|---|
| 1-10 | Balya(Childhood) | Vacha,Kashmari,S warna |
| 11-20 | Vridhhi(Growth) | Kashmari, Bala,Ashwagandha |
| 21-30 | Chavi(Complexion) | Aamlaki,Lauha |
| 31-40 | Medha(Intelligence) | Shankhpushpi,yashtimadhu,Guduchi,Ashwag |
| 41-50 | Twak(skin lusture) | Bhringraj,Samrajipriyala,Haridra |
| 51-60 | Drishti(vision) | Triphalaghrita,saptamritlauha,Kataka |
| 61-70 | Shukra(semen) | Kapikacchubeeja, Ashwagandha, Krishnamusali,g |
| 71-80 | Vikram(valor) | These age group are not fit for rasayan karma |
| 81-90 | Buddhi (wisdom) | |
| 91-100 | Karmendriya(muscles) | |
| 101-110 | Cheto(mana) | |
| 110-120 | Jivan(life) | |

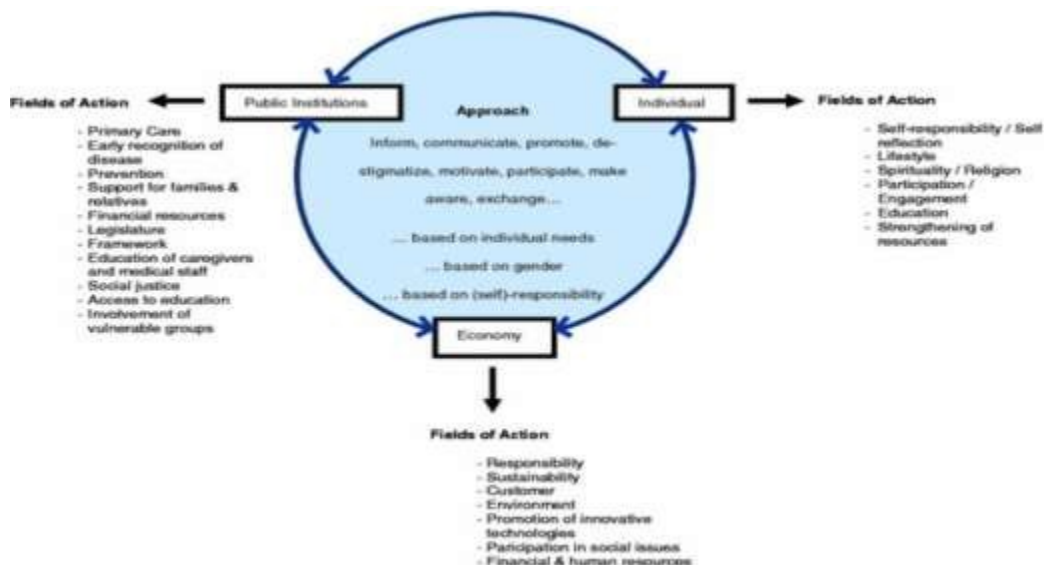
MANA- मनुष्यस्य मनुष्यः मनुष्यस्य मनुष्यः (०.०.8/4)

Mana is the atiindriya means it has both functions of gyanendriya as well as karmendriya. The capability of indriya to catch their vishaya is mainly due to mana.

TYPES OF MANA- Their guna-

| SATVA | RAJA | TAMA |
|--|---|--|
| Denotes existence, bright knowledge, origin of comfort, intelligence, creates balance and stability, happiness, clarity, peace | Quality of change, activity, turbulence, motivates, pleasure, owing to its unbalanced nature it results in pain, suffering, distress, overthinking, anger, jealous, greed | Quality of dullness, darkness, heaviness, ignorance, delusion, insensitivity, sleep, loss of awareness, anorexia, fear, tandra, idleness |

Raja and tama are the mansika dosha that affects the normal equilibrium of mind in geriatrics.



CHANGES THAT CAUSES DISORDERS IN OLD AGE-

1. Vraddhavastha has dominance of vata dosha, which is the pradhan dosha among three, so deterioration of physiological vata causes vata disorders – both physically and mentally.
2. Since Vata dosha has rajo guna pradhanta so due to this normal mental state is affected.
3. Vraddhavastha is the degenerative change so normal physical and mental activities are diminished.

4. 13 types of agni (1 Jatharagni, 5 bhutagni and 7 Dhatuagni) also becomes visham (due to vata dosha), so it causes improper digestion and metabolism problems resulting in agni dushti janya vikar.
5. Since capability of agni is decreased so the poshan and metabolism of datus and updhatus are also deteriorated.
6. And at last maladushti also occurs which causes deposition of mala in the body.
7. Oja is the main factors to maintain our healthy life, because it is the sara of all dhatus, and due to improper formation of dhatus, oja is also influenced, which results in immunological disorders.

CAUSES OF GERIATRICS CHANGES-

- Dementia is often noticed in old aged people. Sense of being neglected in the family is a common complaint.
- Depression is the most harmful and widely noticed psychological complaint of the senior citizen. It can be due to overthinking. As we know that in vradhavas tha there is predominance of vata dosha and vata has guna of raja, which is also a mansika dosha. So in old age mainly vata disorders arise like delirium, vertigo, spontaneous bone fracture, anxiety, arthritis, chronic kidney disease, coronary heart disease, hypertension, diabetes etc.
- Due to loss of their key support like death of wife/ husband/ sibling/ son/ daughter, retirement, relocation and mainly financial deterioration, they face mental stress due to rajas and tamas dosha.
- Physical and psychological abuse, neglect, financial abuse further add to agony.
- Due to raja dosha-lack of sleep, tension, mood swings urge to know everything occurs.
- Due to tama dosha- Moha, agyan, aruchi, tandra, bhaya, loss of memory, forgetting everything occurs.
- These changes cause physical, social and mental retardness.

PREVENTIVE MEASURES FOR GERIATRICS-

Acharya Charak said “one who treats the disease before its commencement, experiences long lasting happiness. Geriatrics issues are best for confronted by preventive measures than curative ones. Just by adopting a healthier lifestyle, the risk of whole range of diseases can be reduced.

- The diet should be regulated by taking into consideration the habitat, season, age and digestive capacity. Food should be shadrasyukta and fresh. Liquid intake should be more frequent and in small amount. Do not take heavy food at night. After dinner, take a walk for 15-20 minutes in fresh air, add vegetables, nuts, fruits, soups, daliya in your diet, avoid heavy physical work.
- Follow proper dincharya, ritucharya, never suppress the natural urges (adarniyavega), along with this regular exercise (balardh vyayam), yoga, meditation, prayers, motivational readings should be included in daily routine.
- Rasayan- Vayasthapana drugs, medhya rasayan, reverse degenerative changes of mind and body, increase life span with quality health.
- Longevity promoting yoga-
Asanas- Surya namaskar, Pavanmuktasana, Ardhamatsyendrasana, Bhujangasana, Shavasana.

Pranayama- Nadisodhana, kapalbhati, Bhramari, Neti, Bhastrika, Tratak.

Mudra- Khechari mudra, Dharna, Dhyan, Swadhyaya, Ushwarpranidhana.

Yoga provides balance, reduce sympathetic activity, relax our mind, relieve pain, fatigue, depression, strengthen muscles.

| Rasayan | Effects |
|------------------------------|--|
| Brahmi | Memory enhancer, management of aging brain |
| Mandukparni | Helps in mental retardness |
| Ashwagandha | Antistress, nero-regeneration |
| Arjuna, guggulu, pushkarmula | Cardio protective |
| Triphala | Visual disorder |
| Amrita, Amlaki | Immunodeficiency |

RESULTS AND CONCLUSION –

By studying all these facts we conclude that, in today's modern era, *mano dushti* is the main factor which has deformed the mind and mental state of old aged peoples. We can help our senior citizen to fight with all these changes by maintaining a positive attitude towards them, giving them the importance that they deserve, socialize them, ask and talk to them regarding their problems, make small trips with them, and most important do not make them feel obliged for money.

REFERENCE-

1. Shadangdhar Samhita.
2. Sushrut Samhita.
3. Charak Samhita.
4. Ashtang Sangraha.
5. Ashtang Hridaya.
6. Bhela Samhita.

CLINICAL EXAMINATION IN GERIATRIC DISORDERS

‘In the end, its not the years in your life that count. It’s the life in your years.’¹

-Abraham Lincoln

INTRODUCTION:

Geriatrics is emerging as a main challenging speciality, because of ever growing population of aged people all over the world including India .In present era, medical science deals exclusively with the problem of ageing & the diseases of the elderly. Ayurveda is basically the science of life & longitivity .It presents a good concept of ageing, process of delaying the ageing & its management . According to the Ayurveda, ageing is outcome of kala or parinam & described under „svabhavabalapravrittavyadhi „those diseases which produced by the strength of nature such as kshudha, pipasa, jara, mrityu, nidra etc ²..

Recognition of the social presentation of disease is of major importance in older patients. Two major factors influence the recognition of disease processes in older people :

- 1) Acceptance of ill health, with delay in seeking help.
- 2) Atypical presentation of disease processes³

It includes process of history taking, examination & investigation. Proper diagnosis & management in older people requires the identification & treatment of amenable clinical problems & recognition of the special needs & specific clinical presentations of older people. Thus, social aspects of care may be as important as the disease process itself. Understanding this encourages a patient -centered multidisplinary team approach. Caring for older people requires clinical acumen & much skill. Geriatricians not in only recognize diseases & their presentations older people, but perhaps equally importantly act as their patient’s advocates in all areas of healthcare.

HISTORY:

Taking a good history is always essential but requires particular sensitivity in the elderly. Respect for autonomy should always be afforded, just as for the young. Avoid being judgemental & paternalistic. The grey-haired are not necessarily disabled or confused! Even severely physically disabled people, no matter what their age, may have the brightest minds. There are several universal practical points in the way the history is approached which are particularly important when taking history from an older patient.

For the medical assessment, the standard physical examination and past medical history- taking is augmented by an evaluation of possible geriatric syndromes including hearing impairment, cognitive impairment, functional status, depression, falls, gait disorder, and incontinence. The social assessment involves an in-depth history-taking, which may involve obtaining information from collateral sources such as family, neighbors, and friends. The psychological assessment includes screening for depression, which complements a cognitive assessment including screening for dementia.

History taking: points

- The introduction – observation as they enter; greeting
- Cadence and interest
- Position and comfort of patient
- Vision, hearing, cognition
- Environment
- Autonomy and respect
- Use of multiple sources of information
- Interview versus interrogation

Observations during the introduction :-

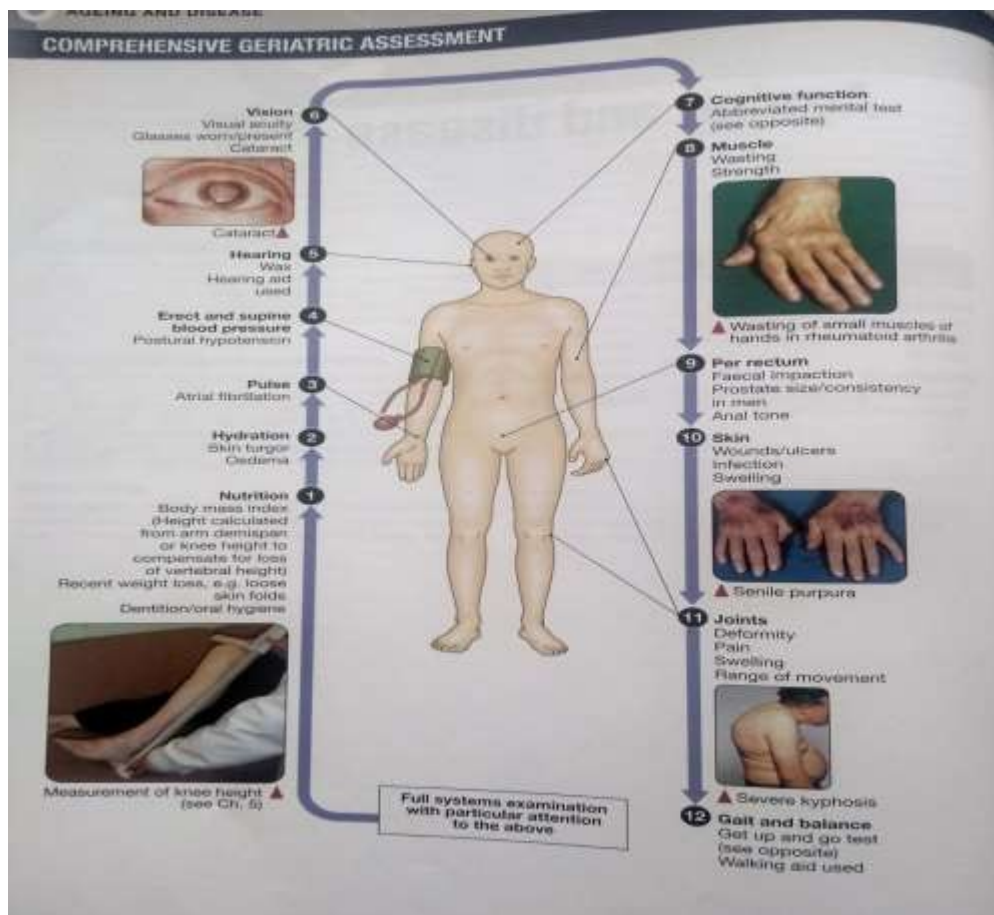
- Can the patient see and hear you?
- Is behaviour normal?
- Is language normal?
- Does the patient understand your role as a doctor?
- Is the patient at ease, or in pain?
- Is there evidence of support from family or friends ?

The social history has extra significance in older people. Routine questions regarding occupation, smoking and alcohol are often forgotten, but should provide a familiar stepping stone to discussing the patient's home, how he is managing and what support he has. 4

ACTIVITIES OF DAILY LIVING (ADL) :-

Older people are prescribed more medication than any other age group . Areas to cover in a treatment history

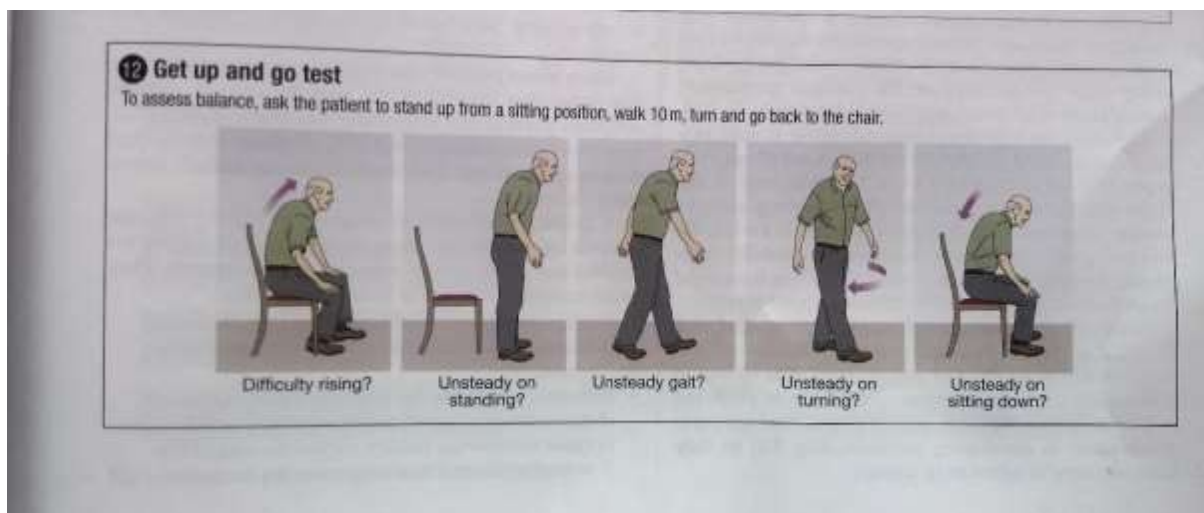
- Current medications
- Previous hospital and family doctor medications
- Treatment from „alternative“ practitioners
- Self-medication
- Past bad experiences with medicines
- Other non-drug treatments
- Medicines kept in the home
- Compliance and help: dosette box⁵



Examination starts at the first contact and continues throughout the consultation. Useful information may be gathered at any point in your assessment, particularly with regard to functional abilities and cognition. The examination of an older person should be thorough, appropriate and respectful, but may be limited by the patient's disability or cognitive impairment, or by lack of appropriate privacy . Older people may present many years after they last visited a doctor. The examination should therefore include screening tests such as body weight, urinalysis, breast examination and digital rectal examination including assessment of the prostate.

Falls/Gait Disturbance

More than one-third of community-dwelling older persons fall each year, and falls are independently associated with functional decline. Also, patients who have fallen are at high risk for falling again and having resulting injuries. Because older persons frequently attribute falls to normal aging, it is very important to ask older patients if they have fallen in the last year, at their initial visit and at least annually. The use of a previsit questionnaire can help elicit this information efficiently.



Tests of gait, balance, and functional reach help to assess patients' risk of falling.

Underlying balance and gait disorders can best be detected by observing patients walking and performing balance maneuvers. To save time, this evaluation can be performed while the patient is entering or leaving the examining room. Several additional simple tests of balance and mobility can also be performed quickly, including the ability to maintain a side-by-side, semi-tandem, and full tandem stance for 10 seconds each; resistance to a nudge; and stability during a 360-degree turn. One Underlying balance and gait disorders can best be detected by observing

patients walking and performing balance maneuvers. Can assess quadriceps strength by observing an older person arising from a hard armless chair without the use of his or her hands. Slow gait speed is also a helpful marker for recurrent falls as well as reduced survival. Patients whose gait speed exceeds 0.8 m per second are likely to live beyond the median life expectancy for age and sex, whereas those whose gait speed is <0.8 m per second are likely to have shorter survival.⁴ The timed „„up and go““ test is a measure of the patient’s ability to rise from an armchair, walk 3 m (10 feet), turn, walk back, and sit down again; those who take longer than 20 seconds to complete the test should receive further evaluation. Physicians should then inquire about the circumstances of the fall. Patients with recurrent falls or falls with any injury should receive a more detailed evaluation, including assessment of all medications, gait and balance, orthostatic blood pressure readings, and vision testing.

2) Hearing Impairment

Hearing impairment affects up to one-third of persons aged >65 years. Independently, it is associated with reduced cognitive and physical function, and reduced social involvement.⁶ It is also often under-recognized and therefore undertreated, and again often not self-reported by patients. There are several methods to help screen for hearing loss . One simple method for a busy practitioner is simply to rely on the patient’s own subjective report of hearing loss.^{7,8} This involves asking patients whether they feel they have hearing impairment. An affirmative answer is considered a positive test for hearing loss, and patients should be referred to an audiologist. Another alternative is the whisper voice test, administered by whispering 3 to 6 random words at a set distance from the patient’s ear and then asking the patient to repeat the words. Patients fail the screening if they are unable to repeat half of the words correctly. This should be done out of the patient’s sight line to prevent lip reading, and the other ear should be covered.

3) Visual Impairment

Visual impairment is a common sensory deficit in the older population; all 4 major eye diseases (cataracts, macular degeneration, diabetic retinopathy, and glaucoma) increase in prevalence with age. Most older persons have presbyopia and require corrective lenses. Visual deficiencies are also independently associated with increased risk of falling, functional decline, and depression. The Snellen eye chart is standard method of screening for visual impairment. This requires the patient to

stand 20 feet from the chart and read letters, using corrective lenses. Patients fail the screening if they are unable to read all of the letters on the 20/40 line with their eyeglasses on, and should then be referred for further evaluation by an ophthalmologist.

Given the high prevalence of eye diseases in the older population and the potential for adverse health consequences of impaired vision, a visit with an optometrist or ophthalmologist is recommended every 1 or 2 years. 8

4) Urinary Incontinence: -

Urinary incontinence is under-reported as well, often due to patients' embarrassment or belief that incontinence is a normal part of aging. In fact, it is a very common problem in both older men and women, and can have deleterious effects on their lives, including urinary tract infections, sleep disruption with subsequent falls, and pressure ulcers.

It is also a marker for higher mortality in older adults. There are many treatment options available, including behavioral, pharmacologic, and surgical. A simple and efficient screen for urinary incontinence is a 2-item questionnaire that can be administered by the provider:

„„In the last year have you ever lost urine and gotten wet?"" If so,

(2) „„Have you lost urine on 6 separate days?"" Another single question, „„Have you had urinary incontinence that is bothersome enough that you would like to know how it could be treated?"" may convey additional value in helping to determine which patients would want further evaluation and therapy.9

5) Malnutrition/Weight Loss

The term „„malnutrition"" has been used to refer to a wide spectrum of deficiencies (eg, protein-energy, vitamins) and excesses (eg, obesity, hypervitaminosis) that place older persons at risk for other health conditions, functional decline, and death. Nutritional disorders are very common in older persons, the most common one being obesity (body mass index $> 30 \text{ kg/m}^2$) in community-dwelling. Obesity is associated with functional decline and more comorbidities, such as type 2 diabetes mellitus and osteoarthritis. Weight loss has commonly been used to define undernutrition and also predicts increased mortality. Although weight loss may be voluntary, any weight loss in an older person raises concern for underlying

illnesses (eg, malignancy, depression) or social/functional barriers (poverty, inability to shop or prepare meals). 9

6) Polypharmacy: -

Polypharmacy is very common in the older population, associated with adverse drug reactions, and can result in hospitalizations and increased morbidity.

Patients often visit >1 healthcare provider and fill prescriptions at multiple pharmacies. Therefore, monitoring the many medications patients are on for drug-disease and drug-drug interactions is imperative at the initial and every follow-up visit. Previsit questionnaires can be completed prior to the initial visit with a complete list of patients' prescription and nonprescription medication¹⁰

7) Skin:-

Wrinkles are mainly due to past exposure to ultraviolet light and hence are not usually seen in covered areas. The skin of the elderly bruises easily (senile purpura); some people have skin like transparent tissue paper, described as paparaceous, especially on the backs of the hands and the forearms. The skin around the eyes may show yellow plaques – Dubreuilh's elastoma. Some solar-induced changes to be aware of include keratoacanthoma, basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

The most common skin lesion noted is the small red Campbell de Morgan spot, a benign lesion seen most often on the trunk and abdomen.

Leg ulcers resistant to healing are common in old age: 50% are due to venous stasis, 10% to arterial disease and 30-40% are of mixed origin. Leg ulcers Examination should include sensory (neuropathic ulcers) and vascular (ischaemia and varicose veins) examinations of the lower limbs. Measure the ankle and brachial blood pressures, using a Doppler meter and sphygmomanometer cuff, the Doppler meter being used instead of a stethoscope at the feet.

8) Cardiovascular system

Cardiovascular examination in older patients is no different from that in younger adults, but there are a number of important factors to take into account. Bradyarrhythmias and tachyarrhythmias are common in sick, older patients and may lead to cardiovascular collapse despite similar rates being well tolerated in the young. The increase in heart rate in response to stress (e.g. exercise, illness or

pyrexia) is reduced in advanced old age, and this may be exacerbated by medications such as β -blockers and other antiarrhythmics.

A lying and standing (or sitting) blood pressure is extremely useful, but may not be obtainable in the more disabled patient. Postural hypotension, defined as a drop in systolic blood pressure on standing of more than 20 mmHg, is a considerable cause of morbidity in old age, often caused or exacerbated by medications. The sitting or standing blood pressure should be measured immediately prior to, and then 1, 3 and 5 minutes after, changing position. Age-related structural and functional changes in the cardiovascular system account for a slight increase in mean blood pressure with increasing age, although adult hypertensive guidelines should still be applied. Heart valves, especially the aortic valve, can become less mobile, exacerbated by calcification. This is known as aortic sclerosis and is characterized by a non-radiating ejection systolic murmur, heard loudest in the aortic area. Degeneration and calcification of the mitral valve can result in either apical ejection murmurs or the more common pansystolic mitral regurgitant murmur. Arterial abnormalities such as an aortic aneurysm, arterial bruits and evidence of peripheral vascular disease should be sought. Palpation of the pulses can be difficult because of atheroma or oedema and, in the lower limbs, Doppler measurement may be necessary to assess the peripheral circulation. Assessment of retinal vessels for signs of disease, as in hypertension and diabetes, can prove difficult in old people owing to the frequent presence of cataracts.

9) Respiratory System :-

Kyphosis, owing to intervertebral disc degeneration and osteoporosis, and calcification of the costal cartilages make the chest wall more rigid and less expansible. A reduction in pulmonary elasticity with age may be responsible for some hyperinflation on a chest radiograph, but this is principally due to pathological hyperexpansion associated with chronic obstructive pulmonary disease (COPD). Generally, the physical signs of respiratory system disease are the same in the old as in the younger patient. Measurements „All that crackles is not necessarily heart failure orIn this situation, a chest radiograph is essential, regardless of the presence or absence of other signs and symptoms of cardiopulmonary disease. Common changes on the chest radiograph include calcification from old tuberculosis, calcification in chondral cartilages and major blood vessels, pleural calcification from past pneumonia and old rib fractures.

Pleural effusions, cardiomegaly, areas of collapse and consolidation, interstitial changes and pleural thickening should not be accepted as normal at any age.¹¹

10) Gastrointestinal system:-

The older patient should be weighed at every visit. As in younger patients, nutritional assessment includes estimation of the body mass index (BMI): weight (kg)/height (m²). Because of osteoporotic vertebral collapse and other age-related changes, height may reduce in the old and so trends in weight are a more useful benchmark. If a true nutritional assessment is required, skin folds at the biceps, triceps, waist and thigh should also be measured. The majority of older people are edentulous. If dentures are used, they should be worn during the examination so that problems with fit, for example poor speech or eating difficulties, can be corrected early. Oral candidiasis is common in the unwell older patient and is easily treatable. Leukoplakia appears as small white patches on the oral mucosa. It is associated with repeated mucosal trauma and may become malignant. Varicosities on the underside of the tongue are seen in about 40% of older people; their significance is unknown, but vitamin C deficiency has been implicated.

Abdominal examination may be limited by Abdominal examination may be limited by patients' orthopnoea, kyphoscoliosis or other disabilities. However, always try to perform an appropriate assessment. If abdominal examination is limited by such disabilities, the patient will also find it difficult to lie supine for investigations such as computed tomography (CT) scanning or colonoscopy.

The indications for digital rectal examination are the same as for younger patients, but this may not be feasible or appropriate, particularly in the very disabled or frail older patient. Constipation severe enough to cause faecal impaction is not uncommon and can have serious consequences.¹²

11) Nervous system:-

Abbreviated Mental Test Score (AMTS) and Mini-Mental State Examination (MMSE) use the „clock test“. The patient is presented with a drawn circle, about 10-15 cm in diameter, and asked to fill in the numbers of a clock face. Abnormalities may be due to visual impairment, agnosia (owing to right parietal lobe lesions) or cognitive impairment.

This test is easily reproducible and less influenced by cultural and language problems than the AMTS or MMSE. A newer test, the Test Your Memory (TYM), has recently been introduced for patients attending diagnostic memory clinics or outpatient clinics, to fill in prior to be seen by medical staff. It is important to recognize difficulties with communication.

Communication problems can be considered in terms of:

- disorders of language (dysphasia)
- disorders of articulation (dyspraxia, dysarthria)
- disorders of voice (dysphonia) or of fluency (dysfluency).

System by examining muscle bulk, tone, power, sensation and tendon reflexes is something the experienced clinician often finds difficult. In older, disabled patients, where judgements about normality and abnormality may be more subjective, this can be especially difficult. As with all clinical skills, such judgement is only acquired with practice. As part of this assessment, it is useful to ask the patient to hold his upper limbs fully extended and supinated, at shoulder height, with his eyes closed. Observe for pronator drift, which is a sign of pyramidal weakness. The reflexes should be examined in the normal manner.¹³

In Ayurveda, there are several parikshas (examination) for exact diagnosis of the diseases which is very helpful in geriatrics. Nidan, puvarupa, rupa upshaya & samprapti helps us in treatment in geriatrics.

TRIVIDHA PARIKSHA¹⁴ :-

- a) Darshan – examine the patients (old people) seeing only -colour of skin, skin, nails, any scopy, x ray, ecg, eeg, height, weight
- b) Sparshan :- pulse, b.p, palpation, percussion
- c) Prashan :- questioning gives a exact idea by taking history of patient

CHATURVIDHA PARIKSHA¹⁶ :-

- a) Pratyaksha
- b) Anuman praman
- c) apatopdesha
- d) Uktipraman are also very imp examination criaterias in old age patients.

SHADAVIDHA PARIKSHA :-

Panchdnyenidrya pariksha (5)+ prashana pariksha

(1) ASHTAVIDHA PARIKSHA 15:-

- a) Nadi (pulse)
- b) Mutra (urine)
- c) Mala (stool)
- d) Jivha (tongue)
- e) Shabda (voice)
- f) Sparsha (touch)
- g) Druka (eye /seeing)
- h) Akriti (shape)

DASHAVIDHA PARIKSHA :-

- a) Dushya
- b) Desha
- c) Bala
- d) Kal
- e) Agni
- f) Prakriti
- g) Vaya
- h) Satva
- i) Satmya
- j) Aahar

All these parikshas very imp & helpful geriatrics, because it has specific standerdization in our samhitas for exact diagnosis (nidan).

CONCLUSION:

Old age is an undesirable and inevitable phase of human life. The life science of Ayurveda explains that, process of senescence begins naturally (swabhavoparamavada) under the influence of time (kala). Though the disturbance in the equilibrium in all the three doshas occurs during old age, there is dominance of vata dosha in this age. Ancient Ayurvedic scholars have clearly mentioned that during old age quantity and quality of all the dhatu decreases. The combination of dominant state of vata dosha and deterioration of rasadidhatu, srotas and agni are responsible for the various degenerative changes and process of decay in the body. Hence geriatric care warrants management of Agni, Ama and Oja (the essence of all Dhatus) at biological level. Rasayana drugs which compensates the age related bio-losses in the body and provide rejuvenating effect, act primarily at the level of Rasa dhatu, Agni and Srotas. Combining rasayana therapy, wholesome diet, dinacharya, ritucharya, sadvritta, yoga and time to time panchkarma are likely to develop an effective package for geriatric care today.

REFERENCES:-

1. Hutchisons clinical methods – Michael glynn, William drake – 23 rd edition - older people -page no 79
2. www.ayurpharma com -concept of jara (ageing) & its management in Ayurveda – vandana gupta , bipin , Bihari, keshari
3. Hutchisons clinical methods – Michael glynn , William drake – 23 rd edition - older people -page no 79
4. Hutchisons clinical methods – Michael glynn , William drake – 23 rd edition - older people -page no 79
5. Davidson,,s principles & practice of medicine – nicki r colledge ,brian r walker ,stuart h . Ralston – 21 st edition – page no 164 – ageing & diseases
6. Mount sinal journal of medicine -78 : 489- 497– 2011,- geriatrics assessment tools
7. Davidson,,s principles & practice of medicine – nicki r colledge, brian r walker, stuart h . Ralston – 21 st edition – page no 164 – ageing & diseases

8. Mount sinhal journal of medicine -78 : 489- 497 – 2011 ,- geriatrics assessment tools
9. Mount sinhal journal of medicine -78 : 489- 497 – 2011 ,- geriatrics assessment tools
10. Mount sinhal journal of medicine -78 : 489- 497 – 2011 ,- geriatrics assessment tools
11. Hutchisons clinical methods – Michael glynn , William drake – 23 rd edition - older people -page no 79
12. Hutchisons clinical methods – Michael glynn , William drake – 23 rd edition -older people -page no 79
13. Hutchisons clinical methods – Michael glynn , William drake – 23 rd edition - older people -page no 79
14. Sushruta Samhita - sutrasthan – ambikadatta shastri – part chaukhamba publication ,2018 – vishikha nupraveshaniya
15. Yogaratnakar 1/1
16. Charak Samhita – vimansthan – 8/94 – chaukhamba publication – part 1 -

CLINICAL EXAMINATION IN GERIATRIC DISORDERS

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INTRODUCTION

The aging process may be defined as the sum of all morphologic and functional alterations that occur in an organism, and lead to functional impairment, which decreases the ability to survive stress.

Aging is manifested at all levels. The changes seen are not dramatic, but with time leads to exponentially increasing mortality rate at the population levels. The origin of this complex aging phenomenon is at the biological level.

BIOLOGY OF AGING :

It is difficult to delineate where the normal aging process ends and the disease process begins.

FACTORS INFLUENCING AGING :

Genetic factors: Mutation, Species specific life spans, Hybrid vigor, Sex, Parental age, Twin studies, Premature aging syndrome , Cells in culture

Environmental Factors: Physical and chemical components – radiation, Biologic factors – nutrition, Pathogens and parasites, Tropical countries, Socio-economic factors, Low income groups, Bad housing, Poor working condition, Stresses of life

BIOLOGIC THEORIES OF AGING :

Genetic theories: Error theories, Somatic mutations, Genetically programmed senescence, Disposable soma theory

Non genetic theories:- Immunologic theories, Free-radical theory, Cross linking theory, Metabolic rate or wear and tear theory

PHYSIOLOGY OF AGING :

Physiological deterioration - increases with age

It reduces physiological capacity and the ability to meet challenges. It is progressive. Major contributing factor to death of the extremely old.

CENTRAL NERVOUS SYSTEM :

Impairment of learning and memory after 70 yrs. Slowing of central processing

Decrease in the brain size and weight

Deterioration of the motor systems

Decrease function of the extrapyramidal system

- ✓ Cerebellar function

- ✓ Muscular strength

Increase in the Movement time & Reaction time

Sensory systems- Loss of Vibratory perceptions in lower extremities, Touch, Taste, Smell, Hearing, Vision

Sleep- Shortening of sleep time, Increased multiple brief awakening

Neuro muscular system- loss of muscle mass, muscle strength, muscle performance

CARDIO-VASCULAR SYSTEM-

Decrease in intrinsic heart rate,

Maximum HR during exercise,

Cardiac output, oxygen consumption

Increase in Peripheral resistance

Muscle stiffness

Contraction period

Thickness of walls of

aorta

RESPIRATORY SYSTEM:

Increase in residual volume

Decrease in expiratory reserve volume

No change in total lung capacity

Marked changes in airflow

KIDNEY AND BODY FLUIDS:

Loss of Weight of kidney & Glomeruli

Deterioration of function:- Progressive declination in renal blood flow & GFR (glomerular filtration rate)

GASTROINTESTINAL SYSTEM :

Disordered contractions

Spontaneous gastro-oesophageal reflex

Slow gastric emptying Loss fat absorption

Very slight impairment of protein digestion

Reduction in calcium absorption

Decreased secretion by gastric glands - less volume and conc. of HCl, Intrinsic factor, Pepsin

ENDOCRINES:

Adenohypophysis-secretion of thyrotropin is blunted

Neurohypophysis - greater release of antidiuretic hormone

Thyroid - Slight decrease in T4 (thyroxine) & Cortisol secretion is decreased

Aldosterone - decreased

Insulin - decreased sensitivity of the target tissues to the action of insulin- glucose intolerance

REPRODUCTION:

Men-Decline in sexual interest, drive and vigor

Increase in plasma conc. of LH (leutenizing hormone) and FSH(follicle stimulating hormone)

Women-Marked decline in estrogen concentration after menopause

MISCELLANEOUS:

Loss of lean body mass

Body fat increase with age

Decrease in BMR

Reduced ability to maintain body temperature

Weak Immune system

Oral mucosa :

The clinical picture is one that of atrophy

- Thin, smooth, dry - satin like
- Loss of elasticity and stippling
- More susceptible to injury
- Decreased repair potential
- Frequent application of soft liners.

Skin changes:

- Wrinkled, dry, patchy pigmentation
- Loss of elasticity and fine pattern.
- Diminished bulk of muscles, fat and connective tissue drooning of skin into folds and creases

Gingiva: Loss of stippling, Oedematous appearance, Thin keratinized layer, Tissue is easily injured

Lips : Angular cheilitis, Vit B deficiency, Dehydration

Teeth: Enamel , Attrition, Erosion , Abrasion, Fluoride content is increases

Enamel cracks – increases, Enamel lamellae - increases

Cementum - increase in thickness Dentin - Secondary dentin formation Obturation of dentinal tubules

Pulp Fibre – Increased, Blood supply – reduces , Pulpstones - increases

SALIVARY CHANGES : Salivary flow reduces

Medication- Depression , Insomnia → Salivary gland

atrophy **CONSEQUENCES :**

Diminished functions like

mastication Digestive problems

Poor retention of dentures

BONE TISSUE:

Compact or cortical bone

Spongy or trabecular or cancellous bone

EFFECTS OF AGING:

Thinning of cortical bone Increase in

porosity Loss of trabecular Cellular atrophy

Sclerosis Maxilla-narrower

Mandible - wider posteriorly

TONGUE AND TASTE:

Smooth, glossy or red and inflamed in appearance

Disturbed sensation - taste

Soreness, burning (post menopausal women) Varicose veins on the ventral surface

TONGUE SIZE:

Does not vary with age but over development of intrinsic muscles, hence larger tongue (loss of teeth mastication and to keep the loose denture).

IMPACT OF ENVIRONMENTAL AND SOCIAL FORCES ON AGING:

An older person's life is basically roleless, unstructured by the society, and conspicuously lacking in norms. Rosow (1974)

GENERAL MEDICAL ASPECTS OF AGING CARDIOPULMONARY DISORDERS:

Valvular heart disease

Cardiac arrhythmias

Coronary artery disease / ischemic heart disease. Hypertension

Congestive heart failure

Chronic bronchitis/emphysema.

NERVOUS SYSTEM DISORDERS:

CVA (cerebrovascular accidents) or strokes Parkinson's disease

Tardive dyskinesia

GEROPSYCHIATRIC DISORDERS:

Situational disorders:

Associated with emotional crisis or prolonged situational stress.

Improper oral hygiene

Sustained muscular tension.

Bruxism

Atypical facial pain

Burning mouth and/or tongue.

Such patients should be treated with compassion, respect and willingness to comfort them

AFFECTIVE DISORDERS:

Depression: Usually co-operative, Appear to forget clear instructions & Fatigue easily and require several short appointments.

Side effects of anti-depressants: Burning mouth, Postural dizziness, Excitement, Tachycardia, Overactivity, Rapid speech, Confusion

ANXIETY DISORDERS:

Apprehensiveness, Worry, Agitation, Tachycardia, Dizziness, Weakness, Visual and gastro intestinal disturbance, Fatigue and headache, Insomnia, Sometimes depressive mood elements

PARANOID STATES:

Paranoid is a group of symptoms involving irrational suspiciousness on others

CHRONIC MENTAL DISORDER PERSISTING INTO LATE LIFE:

Chronic schizophrenics who survive into their 60's or 70's often display no florid psychotic symptoms, showing only passivity, impoverishment of social, intellectual and emotional life, social and financial dependency and occasional odd habits.

They neglect even an extensive oral disease

Disease which interfere with Digestion, Absorption , Utilization of foods.

eg: Oral cancers

Chronic ulcerative lesions

Diverticulosis → presented by constipation

Atrophic gastritis

Liver dysfunction

ORAL SYMPTOMS OF NUTRITIONAL DEFICIENCIES:

The symptoms may coincide, with, or follow the appearance of deficiency induced signs. They are represented by Burning, Soreness, Tenderness, Dryness, Sialorrhea
Loss of diminution of taste (Ageusia or dysgeusia)

SORENESS AND BURNING OF TONGUE:

Iron deficiency anemia, Vit B₁₂, responsive pernicious anemia.

STOMATODYNIA:

Pellagra, Sprue, Kwashiorkor, Scurvy, Nutritional microcytic anemia

XEROSTOMIA :

Vit A deficiency, Ariboflavinosis, Pellagra pernicious anemia

IRON DEFICIENCY ANEMIA:-

Dehydration, Sialorrhea, Acute nutritional deficiency stomatitis, Acute pellagra, Impairment of taste sense , Pellagra, Pernicious anemia.

ORAL SIGNS OF NUTRITIONAL DEFICIENCY :

Cheilosis, Gingivitis, Glossitis, Dehydration, Sialorrhea, Acute nutritional deficiency stomatitis, Acute pellagra Impairment of taste sense: Pellagra, Pernicious anemia, Cheilosis, Gingivitis, Glossitis

LIP LESIONS :

Deficiencies of riboflavin, niacin, protein, vitamin B₁, folic acid, iron, pyridoxine, pantothenic acid and vitamin C.

Gingivitis:

Deficiencies of acin, tryptophan, and vitamin C. Glossitis:Niacin, folic acid, vit B pyridoxine, protein and iron deficiency.

DISCUSSION

A common accompanying phenomenon in the elderly (above 75 years of age) is the increased risk of chronic morbidities. This is associated with an increased requirement for health care activities that include the patients' assessment and monitoring. In US patients (according to CDC) aged 50 – 74 years up to 40 per cent of cancers are linked to obesity. Increased body weight is a risk factor for at least 13 cancers (i.e. esophageal, thyroid, breast, gall-bladder, gastric, liver, pancreas, renal, ovarian, uterine and colorectal cancers. Some analytes with altered investigation results in the elderly.

As Increasing alkaline phosphatase, antinuclear antibody, fibrinogen, FSH, LH, SHBG, gamma glutamil transferase, gastrin, uric acid, interleukin-6, insulin, cholesterol, parathormone (PTH), prostate specific antigen (PSA), rheuma factor, copper, triglycerol, ESR & Decreasing aldosterone, vitamin B₁₂, dihydroepiandrosterone (DHEA), vitamin D, ferritin, phosphate, HDL-cholesterol, IGF-1, interleukin-1, calcium (total), creatinine clearance, creatine kinase, magnesium, growth hormone, estradiol, free testosterone, T₃, iron

CONCLUSION

The geriatric assessment aids in the diagnosis of medical conditions; development of treatment and follow-up plans; coordination of management of care; and evaluation of long-term care needs and optimal placement. Assessing the health needs of elderly patients can reduce their hospitalization rate and enhance their quality of life and independence. Information obtained from an accurate assessment serves as the foundation for age-appropriate nursing care.

NIDANPANCHAKA IN JARA JANYAVYADHI

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ABSTRACT:

Ayurveda considers Rasayana as one of the foremost branches of Astanga Ayurveda and have rightly justified its status by the place it given in the Ayurvedic treatises. The word Rasayana should not be mistaken as a therapy exclusively related to old age. It can be applied from pediatrics to geriatrics. Susruta defines Rasayana as a measure, which prolongs and provides positive health, improves mental faculties and provides resistance and immunity against diseases. Charaka states that the means of obtaining optimum nourishment to the Dhatus are called Rasayanas.

Introduction:

Aging is both a complex and challenging scientific problem and a fact of universal concern. In his classic – “The Biology of death”. Raymond Pearl asserts that “Probably no subject so deeply interests human beings as that of the duration of human life.” This concern is extremely ancient. Despite the various, recent efforts of modern science to unravel the mystery of aging, the age old science of Indian Medicine, Ayurveda, clearly explains the various details of aging in its classics.

Aging in modern science is defined as a progressive failure of the body homeostatic adaptive response. This concept of aging is widely scattered in various texts in the Ayurvedic classics, but has also been focally concerned under a specialty called Rasayana. As said by.

Dostoevsky that “If you were to destroy in mankind the belief in immortality, not only love, but every living force maintaining the life of the world would at once be dried up”. Probably this psychological pursuit towards attaining immortality would have been the driving force for our ancient sages, who have established and rightly justified Rasayana as the foremost branch of Astanga Ayurveda.

Jara :- Its definition and place in Ayurveda

Ayurveda has considered Jara or Vardhakya as a natural and inevitable process as well as a Swabhavaja vyadhi (natural disease). This term has been used frequently in almost all the treatises of philosophy, mythology, art etc. It is depicted as an unwanted, distressful phase of life full of miseries. Etymologically, the term Jara comprises of Jr+Ana+Tap. The term Jara has been derived from the Sanskrit root, “Jrish vayohanow” which can be explained as “Vayah krta slata mamsadya vastha visesa” which means the muscles and other tissues are loosened under the influence of aging. Totally this term indicates of the „loss” in the period of life span.

Consideration in Regard to Tridosha and Seven Dhatus/Elemental tissues.

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Sequential Ksaya in Aging :-

Vagbhata and Sarangadhara presented an interesting scheme for loss of different biological factors during the lifetime, as a function of aging in different decades.

Mile Stones of Aging or sequential loss of biological factors in Aging

| Decades | Year | Vagbhata | Sarangadha |
|---------|--------|----------|------------|
| First | 1-10 | Baly | Balya |
| Second | 11-20 | Vrddh | Vrddhi |
| Third | 21-30 | Prabh | Cabi |
| Fourth | 31-40 | Medh | Medha |
| Fifth | 41-50 | Tvaca | Tvaca |
| Sixth | 51-60 | Sukra | Drsti |
| Seventh | 61-70 | Drsti | Sukra |
| Eight | 71-80 | Srotre | Sukra |
| Ninth | 81-90 | Manu | Buddhi |
| Tenth | 91-100 | Spars | Karmend |

Defining “Ayu” :-

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„Etigaccati iti ayuh“, derived from the root “Unn gamanaseela” indicates its nature of continuation. Caraka and Vagbhata named the very first chapters of their treatise, Deergham, Jjivitiyam and Ayuskamiyam respectively, indicating the measures adopted for a healthy longevity. This proves beyond any doubt that the concept of geriatrics were embedded in Ayurveda since time immemorial.

„Ayu“ is the integral combination of Sattwa (psyche), Atma (soul), Sarira (body) and Indriyas (sense). Leaving Atma, which is immune to the cycle of birth, death and disease, the other three components have to be considered for understanding the aging process.

Sarira :-

Sarira is the grossest component of Ayu, which is made up of five Mahabhutas and is the abode of mind and consciousness.

Indriyas represent the sensorial apparatus, motor activities and the psyche. The Indriya vyapara i.e., functioning of sense is the manifestation of Atma. Indriyas connect the external world with the inner world. Indriyas are of 3 types : Jnanendriya (organs of perception) helps in receiving the knowledge; Karmendriya (organ of action) are meant for response through motor functions. The manas (mind) is responsible for the action of both Jnana and Karma Indriyas, hence it is called as Ubhayendriya.

Purusa comprises of „Sattva“, „Atma“ and „Sarira“ and these three constitute the tripod of life. Atma is omnipotent, imperceptible; unmanifested and is the conscious element in the body.

Pathophysiology of Aging :-

Sarira : “Dosa dhatumala moolam hi sariram”

The three basic constituents of human body, Vata, Pitta and Kapha, in a balanced state structurally and functionally maintain the health and in an imbalanced state produce disease.

Aging and the Tridosas :-

| Dos | Balyavastha | Madhyavastha | Vrddhavastha |
|-------|-------------|--------------|--------------|
| Kaph | +++ | ++ | + |
| Pitta | ++ | +++ | ++ |
| Vata | + | + | +++ |

Amongst, these Dosas, Kapha is predominant in Balya, Pitta in Madhya and Vata in Vardhakya/Vrddhavastha. In the old age, many syndromes are observed which are the result of imbalance in the body constituents i.e., Vata, Pitta and Kapha to a lesser or greater extent. This imbalance varies in velocity and intensity depending upon many factors such as life style, habits, age etc.

Thus. these variations are observed in the psychosomatic constitution of a person (Su. S. 41:62)

The normal function of Pancavidha vata such as Utsaha, Uccwasa, Niswasa, Chesta etc., are affected or deteriorated in old age.

Jara and Agni :-

There are 13 types of Agni described in Ayurveda which represents the digestive and metabolic fire in the body. It consists of digestive juices, enzymes, hormones etc, participating in metabolism. Caraka cikitsa 15/3 states that Agni is responsible for Ayu, Varna, Bala, Svasthya, Utsaha, Upacaya, Prabha, Ojas, Agni, Prana etc.

Based on the Bala, Agni in turn is of 4 types : Tiksnagni, Samagni, Visamagni and Mandagni. In old age, due to the predominance of Vata dosa, Visamagni prevails leading to Visamagnijanya rogas such as Ajeerna, Adhmana, Sula, Udavarta, Atisara, Antrakuja, Pravahana etc.

In young adults, due to increased activity of Pitta, the didestive capacity will be at its peak. The optimum activity of Agni is responsible for growth and development of the body and maintains vitality and vigor of an individual. So, in old age, due to Visamagni, defective metabolism occurs within the body leading to involuntary changes such as Ksaya and „Sosa“.

Jara and Malas :-

Malas are equally important as the of Dosa and Dhatus. They form the Mula dravya of the body. They arise out of Kittapaka at the Pacakagni and Dhatwagni levels. The various Malas mentioned in Astanga hrdaya are Vata, Pitta, Kapha,

Khamala, Karnamala, Aksimala, Asyamala, Prajananamala, Nasikamala, Lomakupamala, Kesa, Smasru, Loma and Nakha etc.

These play a vital role in the body dynamics, as elimination of Mala is an index of life activities. Hampered Agni in old age leads to Malaksaya. The common features such as pain in chest, dysuria, haematuria, excessive thirst, dryness of mouth, skin are found in Malaksaya.

Jara and Indriyas :-

Indriya is defined as “Lingamindrasya” sign of life. Indriyas in turn are of three kinds: Jnanendriya, Karmendriya, Ubhayendriya. The Tridosas influences the Indriya in performing its functions as it has been described in Caraka that Pranavata does the function of Sarvendriya yojana and Indriya tarpana is done by Tarpaka kapha etc.

Various disorders of Jnanendriya are observed in old age such as Aksihundana, Karnanada, Supti, Kandu, Arasagnata etc. The functions of Karmendriyas are also adversely affected in old age.

Examples of “Jara janyavyadhi” :-

While this is by no means a comprehensive list of ailments experienced by older adults, these and other chronic diseases are among the more common :

- Arthritis
- Cancer
- Chronic Kidney Disease
- Chronic Obstructive Pulmonary Disease
- Dementia, Alzheimer’s, and Parkinson’s
- Diabetes
- Osteoporosis
- Stroke

Modern theories about Aging :-

Unfortunately, there are no generally accepted theories about the cause or causes of aging. The contemporary student of aging is faced with more theories than a centipede has legs. Some are conflicting and some mutually supporting and appear

to deal with different aspects of the same general events. Most can claim, at least, some degree of credibility and some are backed by considerable means of evidence, but in no case is there anything like a definite proof. However, all these theories fall into two general categories. According to one view, termed “epiphenomenalism” by Alex Comfort, a leading English student of aging, but also called the “extrinsic” or “random” theory aging results from the “contingencies of living rather than from a programmed development”. Aging can be simply put as result from some form of wear and tear. Perhaps one organ or organ system becomes worn or damaged, and this throws added strain on other system and that, now under duress, strain a third, so an interacting downward spiral is produced. Possibly, there is an accumulation of waste products, or various chemical changes occur which irreparably damage cells or the DNA and protein-synthesizing machinery.

The other view holds that aging is genetically programmed by some kind of a pacemaker or biological death clock. Comforts term this as the “fundamentalist” view.

AYURVEDA PERSPECTIVE ON NEURODEGENERATIVE DISORDERS W.S.R TO FRONTOTEMPORAL DEMENTIA (FTD)

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Abstract:

Senility is viewed as an unavoidable, undesirable, and problem-ridden phase of life which is generally accompanied by a number of problems that an individual has to confront. With the growing age, a person has to face physiological, psychological, emotional, financial and other problems in their day-to-day life due to degenerative changes in the body. Dementia is typically progressive and nonreversible condition occurs with aging due to neurodegeneration. Dementia is a chronic brain disorder in which there is a progressive decline in acquired intellect, behavior, memory and personality. As per Ayurveda, Vṛddhāvasthā (Senility) is Vāta doṣa prominent phase of life. Some of the Guṇās (qualities) of Vāta are degenerative by the nature and whenever Vāta is increased, concurrently these qualities of Vāta are also increased and they result in degenerative changes in the body in terms of Dhātukṣaya, Balakṣaya and Ojakṣaya. This article is tried to explain the role of Vāta doṣa (aggravated) in the pathogenesis of Neurodegenerative diseases with special reference to Frontotemporal Dementia (FTD).

Key words: Aging, Vṛddhāvasthā, Vāta vṛddhi, Dementia, Frontotemporal Dementia

Introduction:

Aging:ⁱ

Aging can be defined as the gradual progressive decline in structure and function which begins to unfold after the achievement of sexual maturity. There are various mechanisms that cause aging such as Telomere shortening (decreased cellular replication), Environmental and Metabolic insults (Reactive oxygen species, free radicals, endotoxins, etc), Defective proteins homeostasis (decrease proteins), etc. these all lead to cellular loss and /or decreased cellular functions which result in cellular aging. Aging is associated with more morbidity, mortality, hospitalization, and loss of functional status.

Geriatric Giants:ⁱⁱ

This term is coined by Bernard Issacs. It refers to the principal chronic disabilities of old age that have an impact on physical, mental and social domains of older peoples.

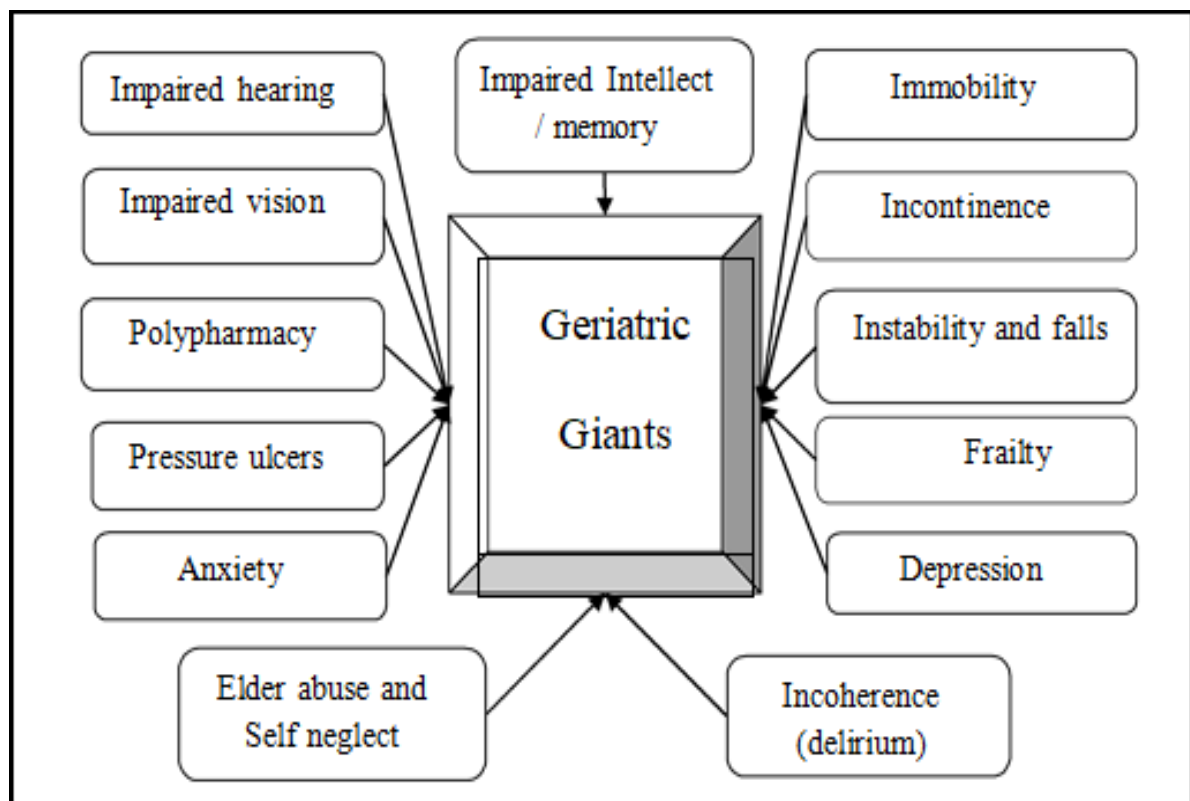


Figure No. 01. Shows Modern Geriatric Giants

Dementia:

Dementia is the progressive deterioration of intellect, emotional control, social behavior and motivation associated with loss of memory. It is age related disorder. Usually, it occurs above the age of 65 years. When it occurs under the age of 65, it is called pre-senile dementia.ⁱⁱⁱ It affects 5-10 % of those above 65 years and 20-25% over 85 years.^{iv}

According to DSM-IV, the **Diagnostic criteria for Dementia** are as below:^v

- ✓ Memory impairment: Impaired ability to learn new information or to recall old information.
- ✓ One or more of the following:
 - Apraxia (impaired ability to carry out motor activities despite intact motor function);
 - Agnosia (failure to recognize or identify objects despite intact sensory function);
 - Disturbance in executive functioning- impaired ability to plan, organize, sequence, abstract.
- ✓ Cognitive deficits result in functional impairment (Social/ occupational).
- ✓ Cognitive deficits do not occur exclusively solely during a delirium.
- ✓ NOT due to other medical or psychiatric conditions.

Clinical Features of Dementia:^{vi}

Cognitive symptoms: Memory loss is the most common, and usually the presenting complain- patients have difficulty learning and retaining new information. Later in the disease, remote memories are also affected. Other cognitive defects include Anomia, Aphasia, Apraxia, Agnosia and Executive planning.

Non- Cognitive symptoms: A wide range can occur including disorders of thought content (delusions of theft, infidelity and abandonment, persecutory Ideation), disorders of perception (auditory, visual and other hallucinations) and misidentification. Disorders of affect and behavior- include depressive symptoms, hypomania, aggression, wandering, agitation, stereotypes, hypersexuality, hypermorality and hyperphagia.

Frontotemporal Dementia (FTD):

Frontotemporal dementia accounts for up to 20% of cases of dementia in the presenium. vii It is characterized by focal atrophy of the frontal and temporal lobes in the absence of Alzheimer pathology. Frontotemporal dementia has recently been recognized as a common cause of young-onset dementia.viii Clinically, presents initially with language abnormalities and behavioral disturbances. FTD occurs between the ages of 35- 75 years, and only rarely after age 75; the mean age of onset is the sixth decade.ix Both genders are equally affected by FTD. Pick"s disease was the first recognized subtype of FTD, one that is characterized pathologically by the presence of Pick bodies in the neocortex and hippocampus.

➤ Core diagnostic features of FTD:

- Insidious onset and gradual progression
- Early decline in social interpersonal conduct
- Early impairment in regulation of personal conduct
- Early emotional blunting
- Early loss of insight

➤ Supportive diagnostic features of FTD:

✓ Behavioral disorder

- Decline in personal hygiene and grooming
- Mental rigidity and inflexibility
- Distractibility and impersistence
- Utilization behavior hyperorality and dietary changes
- Perseverations and stereotyped behavior

□ Speech and language deficits

- Altered speech output (aspontaneity and economy of speech)
- Stereotype speech
- Echolalia
- Perseverations
- Mutism

➤ Physical Signs:

- Primitive reflexes; at least one of the grasp, snout and sucking
- Incontinence
- Akinesia, rigidity and tremor (rarely)
- Low and labile blood pressure

➤ Investigations:

- **Neuropsychology:** Significant impairment on frontal lobe tests in the absence of severe amnesia, aphasia or perceptuospatial disorder
- **EEG:** Normal despite clinically evident dementia
- **Brain Imaging:** (Structural and functional) predominant frontal and/or temporal abnormality

Here, an attempt is made to elucidate the symptomatology of Frontotemporal Dementia^x with

Vāta Nānātmaja Vyādhi^{xi}, Vāta vṛddhi lakṣaṇa^{xii} and Oja kṣaya lakṣaṇa^{xiii}.

| Symptomatology as per Ayurveda | References | Symptomatology as per Modern Medicine |
|---|--|---|
| <i>Anavasthita Cittatva</i> (Unstable mind) | <i>Vāta Nānātmaja Vyādhi</i> | - Behavioral, Cognitive and Personality changes |
| <i>Viśād/ Śoka/ Durmano</i> (Depression) | <i>Vāta Nānātmaja Vyādhi</i> <i>Vāta vṛddhi lakṣaṇa</i> <i>Oja kṣaya lakṣaṇa</i> | - Decline in social interpersonal conduct disorders of thought content - Mental rigidity and inflexibility - Decline in personal hygiene and grooming |
| <i>Asvapna</i> (Insomnia) | <i>Vāta Nānātmaja Vyādhi</i> | - Sleep deprivation |
| <i>Tama</i> (Fainting) | <i>Vāta Nānātmaja Vyādhi</i> | - Emotional blunting |
| <i>Uccai śruti</i> (Partial deafness) | <i>Vāta Nānātmaja Vyādhi</i> | - Impaired Hearing |
| <i>Bādhīrya</i> (Deafness) | <i>Vāta Nānātmaja Vyādhi</i> | - Loss of Hearing |
| <i>Timira</i> (Blindness) | <i>Vāta Nānātmaja Vyādhi</i> | - Impaired Vision |
| <i>Vā saṅga</i> (Obstructed Speech) | <i>Vāta Nānātmaja Vyādhi</i> | - Altered speech output (spontaneity and economy of speech), |
| <i>Ghrāṇa nāśa</i> (Anosmia) | <i>Vāta Nānātmaja Vyādhi</i> | - Anosmia |
| <i>Mukatva</i> (Loss of speech) | <i>Vāta Nānātmaja Vyādhi</i> | - Mutism |
| <i>Sanjñā nāśa</i> (Loss of consciousness) | <i>Vāta vṛddhi lakṣaṇa</i> | - Emotional blunting |
| <i>Nidrā nāśa</i> (Insomnia) | <i>Vāta vṛddhi lakṣaṇa</i> | - Insomnia |

| | | |
|---|--|---|
| <i>Bala Upaghāta/</i> <i>Durbalo (Weakness)</i> | <i>Vāta vṛddhi</i> <i>lakṣaṇa Oja kṣaya</i> <i>lakṣaṇa</i> | - Akinesia, rigidity - Incontinence - Low and labile blood pressure -Decline in personal hygiene and grooming |
| <i>Indriya Upaghāta /</i> <i>Vyathitendriya</i> <i>(Altered/ loss of sensorium)</i> | <i>Vāta vṛddhi</i> <i>lakṣaṇa Oja kṣaya</i> <i>lakṣaṇa</i> | - Emotional blunting - Akinesia, rigidity - Incontinence |
| <i>Moha (Confusion)</i> | <i>Vāta vṛddhi</i> <i>lakṣaṇa Oja kṣaya</i> <i>lakṣaṇa</i> | - Distractibility and impersistence - Loss of insight |
| <i>Dainya (Misery)</i> | <i>Vāta vṛddhi lakṣaṇa</i> | - Wandering |
| <i>Bhaya/ Bibhetī</i> <i>(Fear/ Anxiety)</i> <i>Dhyāyati</i> <i>(Deeply worried)</i> | <i>Vāta vṛddhi</i> <i>lakṣaṇa Oja kṣaya</i> <i>lakṣaṇa</i> | - Perseverations and stereotyped behavior - Agitation - Aggression - Utilization behavior hyperorality and dietary changes |
| <i>Pralāpa (Delirium)</i> | <i>Vāta vṛddhi lakṣaṇa</i> <i>Oja kṣaya lakṣaṇa</i> | - Stereotype speech - Echolalia - Perseverations |

Discussion:

Ayurvedic perspective on Neurodegenerative disorders:

The life continuance of an individual is basically divided into 3 phases: Bālyāvasthā (Childhood), Yauvanavasthā (Middle age), and Vṛdhdhāvasthā (Old age). Achāryas have an individual viewpoint on years computed for Vṛdhdhāvasthā. Some Achāryas had given some reference for degenerative changes that occur in the body prior to proceeding in Vṛdhdhāvasthā is by termed Parihāni āvasthā (age period 40- 70 years).

The entire Ayurvedic science is built upon the Tridoṣa Siddhānta. The first stage- Bālyāvastha is governed by Kapha doṣa. The second stage, Madhyamāvasthā is governed by Pitta doṣa. And the third stage, Vṛdhdhāvasthā is governed by Vāta doṣa. Parihani avastha (pre senile period) and vradhavastha (senile period) are vata

dosa prominent āvasthā. During this period of time, Kapha and Pitta doṣa is diminished naturally and Vāta is being flare-up, simultaneously qualities of Vāta

doṣa are increased in the body. Vāta has some Guṇā (qualities) that get involved in the degenerative process in the body like laghu guṇā and khara guṇā which is act as lekhaniya (scraping), viṣada guṇā has kṣālaṇaśakti (elution power) and, rukṣa guṇā has śoṣaṇaśakti (absorbability), etc. Whenever Vāta doṣa is aggravated, these above guṇās are also be increased; might be together or separately and will initiate the process of degeneration in the body in the terms of Dhātukṣaya, Ojakṣaya and Balakṣaya etc. Caraka saṁhitā mentioned kāla (aging) is one of the cause of Ojakṣaya. Many symptoms of FTD are similar with Ojakṣaya lakṣaṇa.

Vāta doṣa gets increased in Vṛddhāvasthā physiologically, but apart from this, there are many factors that play a triggering role in the provocation of Vāta and result in untimely aging (early aging). Disharmonious behavior to Trayo upastambha is one of the leading cause for early aging by increasing Vāta doṣa and Ojakṣaya.

- **Āhāra:** Āhāra is one key factor for maintaining growth and development. Ayurveda gives special emphasis to Āhāra and believes that samyaka Āhāra nourishes the mind, body, and soul. There are some dietary guidelines and rules are given by Acharyas, if they not followed properly they result in an imbalance in doṣas. Anaśana, rukṣa, alpa āhāra, hina mātṛā āhāra, Vāta aggravating āhāra, asnigdha āhāra, etc might result in Vāta vṛddhi and also Ojakṣaya. If a person is taking this kind of food for a long time, the degenerative changes being started in his body due to lack of nutrition and if individuals may suffering from Vāta vṛddhi which might result in Dhātukṣaya, Ojakṣaya (degeneration), etc. Aṣṭāṅga Saṁgraha has mentioned some demerits of hina mātṛā āhāra, (less quantity of food) viz. Vātarogānām hetu (manifesting Vātajanya roga), udāvartakāra (reverse movement of Vāta), aṣṭavidha sāra nāśaka (destroyer of all dhātus and their essence), aojaskara (not manufacturing oja), śarīra mana buddhi indriya upaghāatakāra (loss of body, mind, intellect and sensorium), etc ultimately leads to degeneration and evoking premature aging.
- **Nidrā:** Rātri jāgaraṇ (night vigils) causes Vāta vṛddhi. Caraka Saṁhitā has stated that Nidrā (Proper sleep) is responsible for sukha- dukha, puṣṭi- kārśya, vṛṣatā- klībatā, jñāna – ajñāna and bala- abala.^{xiv} If a person takes proper sleep then he will get sukha (happiness), puṣṭi (nourishment), vṛṣatā (virility), jñāna (knowledge), and bala (energy) but if he won't then

contrasting effects will get like dukha (misery), kārśya (emaciation), klībatā (frigidity), jñāna (ignorance), and abala (weakness). All the above demerits

are caused by Vāta vṛddhi. Modern medical science also believed that Sleep deprivation or Insomnia causes several negative effects on the brain as well as on the body. Prajāgara (lying awake at night) is one the cause for Ojakṣayaxv.

- **Brahmacaryā:** If the person would have to be associated with excessive sexual activity, his Śukra dhātu will be depleted, and according to Rājanyakṣamā pratigāmī saṁprāpti his pūrvo- pūrvottara dhātus will be diminished over time. This happens due to Vāta prakopa. In Saṁhitās, ati vyāyāma (excessive exercise) or ati vyavāya (excessive sexual intercourse) are said to be a Vāta prakopaka. Excessive loss Śukra is one of the etiological factor of Ojakṣaya.

Conclusion:

Symptomatology of Frontotemporal Dementia are seems similar to Vāta vṛddhi lakṣana, Vāta nānātmajavyādhi and Ojakṣaya lakṣana. Manifestation of the disease condition is purely due to degenerative changes in pre senile periods. This disease condition is not a reversible but with the healthy changes in dietary habits and lifestyle modification, the disease condition might be preventable in some extent.

REFERENCES:

1. Archith boloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
2. Archith boloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
3. K Sembulingam, Prema Sembulingam. Essential of Medical Physiology. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2016
4. Archith boloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
5. Archith boloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
6. Aspi F Golwall, Sharukh A Golwalla. Golwall"s Medicine for students. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2017

7. Julie S. Snowden, David Neary, David M. A. Mann. Frontotemporal Dementia, Published online by Cambridge University Press: 02 January 2018
8. Zoe Arvanitakis. Update on Frontotemporal Dementia; Neurologist, HHS Public Author Manuscript, PMC 2013 Apr 22
9. Archith bloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
10. Archith bloor, Ramdas Nayak. Medicine. The Health Sciences Publisher, New Delhi; Jaypee Brothers Medicinal Publishers (P) Ltd. 2018
11. Agniveśa. Caraka Saṁhitā with „Ayurveda Dīpikā“ Commentary by Cakrapāṇī- Edited by Acharya YT, ChaukhambhaSurbharatiPrakashan, Varanasi- 221001, 2013
12. Suśruta. Suśruta Saṁhitā, „Ayurveda tattva sandīpikā“ hindi commentary by Shastri AD, Part- I (Sutra, Nidāna, Śārira, Cikitsā, Kalpasthānas), Chaukhambha Sanskrit Sansthan, Varanasi- 221001, 2014
13. Agniveśa. Caraka Saṁhitā with „Ayurveda Dīpikā“ Commentary by Cakrapāṇī- Edited by Acharya YT, ChaukhambhaSurbharatiPrakashan, Varanasi- 221001, 2013
14. Agniveśa. Caraka Saṁhitā with „Ayurveda Dīpikā“ Commentary by Cakrapāṇī- Edited by Acharya YT, ChaukhambhaSurbharatiPrakashan, Varanasi- 221001, 2013
15. Agniveśa. Caraka Saṁhitā with „Ayurveda Dīpikā“ Commentary by Cakrapāṇī- Edited by Acharya YT, ChaukhambhaSurbharatiPrakashan, Varanasi- 221001, 2013

THE EFFECTS OF GERIATRICS ON MANA WITH REFERENCE OF SATTVAVAJAYA

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ABSTRACT:

In This Modern Era, The Issues Regarding GERIATRICS has become a Threatening Social Problem. It"s Critical Situation with Rising No. Of Problems of Vriddhashrama i.e. Old Age Homes. Due to Mental Issues (Mana Asuntalana) Speically.

So the Sattvavajaya of Ayurveda Is the Gold Standard Solution is A Miracle and Ethival Modern Remedy Of Geriatrics.

The Sattvavajaya- Mana Guna Sattva Vardhana by Adopting Yoga, Ahara, Vihaara, Meditation, Bhajan Sandhya, Nature Picnics, Haasya Yoga is The Best Ray Of Hope In Old Age Issue (GERIATRICS)

CONCEPTS OF GERIATRICS:

Ancient Scientists Of AYURVEDA I.E. AACHARYAS Written That The PARINAMA (Time-Period) Leads To Changes In Living Human Body. As Per The Span Of Time Passes, The Ability To Survive Stress Decreases. Physical And Mental Functional Impairment And Last DEATH. According To Ayurveda, Body Has The Tendancy To Destroy Continuosly I.E. " Sheeryate Iti Shareeram". On An Average, Approx. 25 To 30 Cells Die Per Minute.

Geriatrism Is A Phenomenon Which Leads To Involuntary Degenerative Changes In Body And Mind.

General Life Span:

00-16 Yrs. BALYAVASTHA

16-60 Yrs. TARUNYAVASTHA

60-Onwards, VAARDHAKYAVASTHA

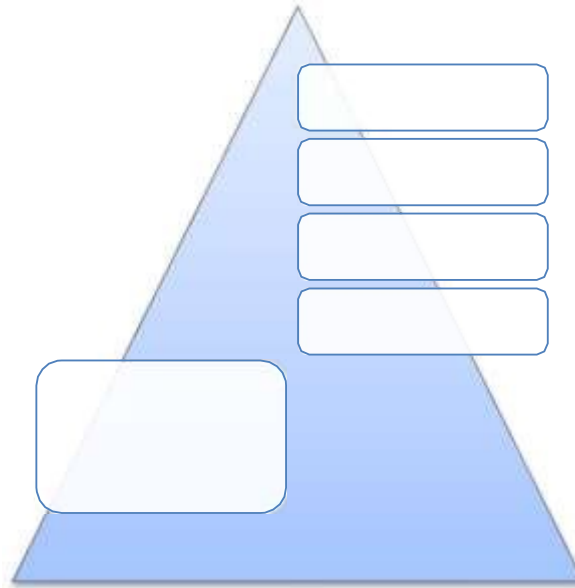
MANA INTRODUCTION:

The Foundation Of Health Is PHYSICAL < MENTAL, SOCIAL And SPIRITUAL State With Not Feeling Of Any Disease And Inferiority Or Fear.

मानसः शरीरं शरीरं च मनः

च शरीरं मनः च शरीरमनसः

(च.च.15/48)



SYNONYMS OF MANA:

Manas, Sattva, Chitta, Hrit, Hridaya

SITE OF MANA

Ashtang Hridayam (Sha. Stha.4/13) =

Hridaya Charaka = Hridaya

Bhela = Shira, Taalu

“HEALTHY MIND IN HEALTHY BODY”

Aatma Manasah Sanyujyate, Manah

Indriyen Indriya Arthena, Iti Dnyaanam !!

Mana Is Important Gold Standard Media For Dnyana Prakriya I.E.
For Acknowledgement. This Is Noted In Ayurveda Only.

TYPES OF MANA AND GUNAS:

Sattva, Raja, Tama

| SATTVA | RAJA | TAMA |
|-------------------------|-------------------|------------------|
| Sharp Knowledge | Hyper Motivations | Dullness |
| Comfortness | Changing Quality | Darkness |
| Brilliancy | Motivation | Heaviness |
| Presence Of Mind | Suffering | Ignorance |
| Intelligence | Distress | Insensitivity |
| Happiness | Over thinking | Sleep (Laziness) |
| Clarity Peace | Anger | Anorexia |
| Togetherness | Jealous | Fear |
| Sharing | Greed | Idleness |
| Laughing (Doshrahit) | (Sadosh Yukt) | Drowsiness |
| | | (Moha Dosha Yukt |

DOSHAS OF MANA: Raja, Tama

E.G. UNMADA (Hysteria), APASMARA (Epilepsy), ATATTVABHINIVESHA (Hallucination) Are Some Manovikara Noted In Ayurveda Samhita.

AIMS AND OBJECTIVE:

- Through Study of Psychological Changes – MANO_AVASTHA_STHITYANTARA During Geriatrics.
- Preventive Measures like SATTVAVAJAYA Therapy During Geriatrics.

MATERIAL AND METHODS:

MATERIAL:

- Literature Collection And Concern Work Done From Ayurveda Samhitas That Are CHARAKA, SUSHRUTA, VAGBHATA.

- Textbooks Of Modern Literature
- Information Collected From Concerned Sites

METHOD:

- Conceptual Study
- Therotical Study Of Geriatrics Psychological Changes Or Variation With MANA (MANAS STHITYANTARA) Are Studied.
- Listed Some Preventive Aspect To Counter Act The Geriatrism.

REVIEW OF LITERATURE:

- Aacharya Charaka Mentioned Old Age Above 60 Years. Aacharya Sushruta Approximated It Above 70 Years.
- Sharangdhar Samhita Presents Loss Of Different Biological Factors During Different Decades Of Life As Per The Ageing Process Of Individual.

SATTVAVAJAYA:

It"s Branch Of Ayurveda Having Broad Spectrum Aspects For Qualitative And Quantitative Improvement Of Mana.

MANA:

Mana Is The Atiindriya Means It Has Both Functions Of Gyanendriya As Well As Karmendriya. The Capability Of Indriya To Catch Their Vishaya Is Mainly Due To Mana.

□□□□ □□□□: □×□□£□ □ (□.□.8/4)

ETIOLOGY OF DISORDERS IN OLD AGE

- In Old Age, VATA Dosha Is Prominent Dosha Among All, So Vata Disorders Physically And Mentally, Both Observed.
- As Vata Dosha Has RAJA GUNA PRADHANATA, So, Mental State Is More Affected.
- Old Age Is Degenerative Natural Process So, Physical And Mental Activities Are Also Diminished.
- All Agni (13) Also Become Vishama Due To Vata Dosha Causes Improper Digestion And Metabolism. It Leads To Agni Dushti Janya Vikaar.
- As Agni Decreases, Santarpan Of Dhatu And Upadhatu Also Deteriorated.

- Mala Dushti Also Causes Deposition Of Malas In Body With Concerned Vyaadhi.
- Saara Of All Dhatus Is OJAS, Is Also Influenced Due To Improper Formation Of Dhatus Leads To Immunological Disorders.

CAUSES OF GERIATRICS CHANGES

- Depression Is Most Harmful And Widely Noticed Psychological Complain Of Old Age Persons. Due To Over Thinking. VATA Dosha And MANO RAJA Dosha Arises Disorders Like Delirium, Vertigo, Fall Down Leads To Fracture, Anxiety, Arthritis, Chronic Kidney Diseases, Chronic Heart Diseases, Diabetes, Prostates And Neurological Disorders, Dementia (Impaired Memory Loss And Judgement) Are Common Complain In Old Age. May Neglected By Family Members.
- Physical, Psychological Abuse, Negligence, Financial Crisis Also Add To Agony.
- Loss Of Or Death Of Life Partner Or Belongings Or Family Members Loved, Retirement, Aloneless, Relocation Also Increases Mental Stress To Raja And Tama Dosha.
- Due To Raja Dosha, Insomnia, Tension, Mood Swings, Hyper Activeness In Unnecessary Or Everything.
- Due To Tama Dosha, Moha, Aruchi, Bhaya, Tandra, Forgetfulness Or Loss Of Memory.
- Above All Factors Leads To Physical, Mental, Social And Spiritual Retardness.

PREVENTIVE MEASURES IN GERIATRICS, SATTVAVAJAYA:

- The Geriatrics Issues Are Best Controlled By Preventive Measures Than Curative, As The Golden Slogan Of Medical World Says; “Prevention Is Better Than Cure.”
- Aahara (Diet) Must Be Regulated By Daily Regimen And Season Wise Regimen. Also According To The Koshta, Agni. Shadrasatmak Food (Balanced Diet) Must Be Fresh, Lukewarm, Palatable By Keeping The Concept Of “Ahara Vidhi Visheshayatanas”.
- Jala Sevan, Dietary Habits Must Be Followed.
- Avoid Eating Heavy Food At Late Nights.

- Shatapavali Or 100 Steps Walking Should Be Done In Fresh Air. Also Enhances Healthy Lifestyle.
- Intake Of Fresh, Green Vegetables, Fruits (Fibrous Diet), Nutritious Soups Must Followed Regularly.
- Follow The Proper Natural Urges. „Adharniya Vega” Should Be Avoided.
- Practice Yoga (Shavasana, Bhujangasana, Pavanmuktasana And Easy Yoga For Elders), Meditation (Vipashyana, Dhyana, Concentration), Pranayama , Prayers, Sadvartana, Sadachara, Motivational Readings. Hobbies Can Be Followed (Singing, Reading Stories, Playing Indoor Games, Fun Acts, Etc.). Healthy Communication Should Be Done.
- Yoga Resulting To Reduce The Sympathetic Activities, Relieves Pain, Depression, Insomnia And Boosts Mind, Tones Up The Muscles.

RESULTS AND CONCLUSION:

By Studying All These Factors, We Conclude That In This Modern Era, Doshas And Vikaaras Related To MANA (Mind) Which Affects It In Geriatrics Can Help To Fight With A Positive Attitude And Sattvavajaya Towards The Healthy Geriatrics Like Sharing Their Problems, Being A Part Of Laughter Clubs, Involving In Various Activities With Enthusiasm.

One Can Attend Trips, Picnics, Gardening, Nature Visits, Worshipping The Deity, Proper Sharing Of Quality Time With Old Age Peoples.

REFERENCES:

- Charaka Samhita
- Sushruta Samhita
- Ashtanga Sangraha
- Ashtanga Hridayam

LABORATORY INVESTIGATIONS IN GERIATRIC DISORDERS

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ABSTRACT:

The life is a time-bound phenomenon. The man is born, grows to adulthood, passes to senility and ultimately dies.

Ageing has been defined as the intrinsic, inevitable and irreversible age associated loss of viability that render us more susceptible to a number of diseases and death or a progressive functional decline of physiological function and a decrease in fecundity with age.

Many age related changes in health can be detected in laboratory investigations.

Ageing changes occur in all of the body's cells, tissues and organs, and these changes affect the functioning of all body systems. Cells become larger and are less able to divide and multiply & further results in waste products build up in tissues. Because of cells and tissues changes, organs also change with ageing. The biggest changes in organ reserve occur in the heart , lungs and kidneys. And these changes & geriatric disorders can be correlated with changes in laboratory values and can increases diagnostic accuracy.

KEYWORD: Ageing, Geriatric Disorders, Laboratory Investigations.

INTRODUCTION:

Old age is often equated with failing health.

It is the process of becoming old and decaying. As age advances, several changes take place in the body, in the external in the condition of Dosha, Dhatu , Mala, Agni, Oja, Mana (mind) and so on.

A common accompanying phenomenon in old age started at cellular level & ends in organ dysfunction and results in increased risk of chronic morbidities. This is associated with an increased requirement for health care activities that include the

patients's assessment and monitoring. Blood sampling and laboratory testing are integral part of this process.

MATERILAS AND METHODS:

To explore and elaborate laboratory investigations in Geriatric disorders. Study review is explained under following headings.

- 1) Changes associated with ageing
- 2) Common geriatric disorders
- 3) Factors affecting laboratory test values in geriatrics.
- 4) Altered laboratory results in geriatrics.

1. Changes associated with ageing :

a) Physical activity

- Unsteadiness or loss of balance
- Dizziness or light-headedness when standing.
- Loss of muscle strength
- Difficulty in moving(less flexibility).
- Difficulty exercising strenuously.

b) Mental Function

- Dementia
- Depression

c) The senses

- Decreases in visual acuity.
- Dry eyes
- Loss of hearing.
- Loss of taste.
- Dry mouth.

d) Eating problems

- Difficulty in swallowing.
- Loss of appetite.

e) Skin and hair

- Wrinkling of skin
- Dry skin
- Slow healing of wounds
- Difficulty in adjusting to changes in temperature.
- Decreased sensation and sensitivity to pain
- Grey or white hair and thinning or loss of hairs.

f) Sexual dysfunction

- Dryness of the vagina
- Erections that do not last as long , are less rigid, or take more time.

g) Immunosenescence

There are a wide variety of age related changes in the immune system, some mediated by chronic inflammation & a chronic pro-inflammatory state. There is decline in B-cell function, a decline in T-cell generation, altered T-cell activation & dysfunction of innate immunity. These changes weaken the the body"s capacity to fight infection.

h) Urological changes

- The urinary bladder is often not sterile in older adults but rather is colonized with bacteria not causing infection.
- And also renal function deteriorates with age and this is factored in when estimating the glomerular filtration rate.

2. Common Geriatric disorders :

a) Cardiovascular diseases

Cardiovascular diseases remains the most common cause of death of older adults, although death rates have dropped in the last 20 yrs. The category includes

chronic ischaemic heart disease , myocardial infarction, congestive heart failure & arrhythmia.

Normal ageing includes vascular remodeling & vascular stiffness that causes arteriosclerosis & atherosclerosis causes inflammation & further vascular changes that lead to hypertension, cardiac events, cerebrovascular events, peripheral vascular disease , cognitive impairment & other organ damage.

b) Osteoarthritis

Osteoarthritis is a classic age related disorder. It is often described as a chronic degenerative.

Ageing changes in the musculoskeletal system increase the propensity to osteoarthritis.

c) Osteoporosis

Osteopenia is normal loss of bone density with ageing associated with increased rate of bone fractures.

d) Diabetes mellitus

Diabetes frequency is a growing problem worldwide, because of lifestyle modification.

e) Cancer

Second leading cause of death in older adults.

f) Ageing & endocrine functions

Endocrine abnormalities are common in older people and increase in frequency as ageing progresses. These involve not only sex organs and their hormone production, but also include non-insulin dependant D.M., hypothyroidism, hyperthyroidism, osteoporosis and the loss of growth hormone. Although some of these are related to ageing process, the others are probably not.

g) Neurological ailments in elderly

Brains & central nervous system are going through the ageing process too. More common neurological disorders are: Alzheimer"s disease , Parkinson"s disease , strokes , neuropathy, sleep issues etc.

h) Prostate enlargement in male is common problem

i) Menopausal syndrome in female is common problem.

3. Factors affecting laboratory test values in geriatrics:

The physiological changes associated with ageing, along with increasing co-morbidities and polypharmacy, mean that older people are more likely to have test results that fall outside of the normal reference range.

Several other problems must be considered in the interpretation of test result in the older population, including the following:

- Physiological changes :

Gonadal hormones level are decreasing, bone loss is increasing; renal function is impaired ; blood fats levels are increased that affects lab values.

- Subclinical disorders are common but often undiagnosed.
- Polypharmacy is important because some drugs directly affect laboratory results. Alcohol and other addicting drugs often are misused but not recognized.
- Malnutrition or poor nutrition is common.
- Life style modification :

Relative immobility and obesity are important factors but only recently have been appreciated ; muscular mass is decreased ; less supply of vitamin D due to less exposure to sun that affects lab values.

- Dietary factors :

Problems with digestion and absorption, dental problems lead to insufficient intake of nutrient rich food- vitamin and mineral trace deficiency.

Above some factors can affect laboratory values in geriatrics.

4. Altered laboratory results in geriatrics:

| Increased lab values | Decreased lab values |
|-----------------------|-------------------------|
| Alkaline phosphatase | Hb % |
| Antinuclear antibody | Aldosteron |
| Cholesterol(LDL,VLDL) | Cholesterol (HDL) |
| Fibrinogen | Vitamin B ₁₂ |

| | |
|---------------------------------|-----------------------------------|
| FSH, LH, SHBG | Dihydroepiandrosterone(DHEA) |
| Gamma glutamil transferase | Vitamin-D |
| Gastrin | Calcium (total) |
| Uric acid | Iron ,Phosphate |
| Interleukin-6 | Interleukin-1 |
| Insulin | Estradiol |
| Parathormone(PTH) | Growth hormone, T ₃ |
| Prostrate specific antigen(PSA) | IGF-1 |
| Copper | Magnesium |
| Ferritin (chronic inflammation) | Ferritin (iron deficiency anemia) |
| Rheumatoid factor | Creatine kinase |
| Triglyceride | Creatinine clearance |
| ESR | Free testosterone |
| Glucose, 2 hr pp | Pao ₂ |

1. Decreased hemoglobin/hematocrit

In the elderly, the impairment of the intestinal absorbance of iron and vitamin B12 may lead to a decrease in hemoglobin and erythrocyte synthesis. Occult blood loss is also common. There is an increased tendency for hemolysis. Therefore, it is recommended to decrease the lower level of reference range of hemoglobin (e.g. 115 g/l and 110 g/l for males and females, respectively). However, it is challenging to differentiate real anemia from the effect of aging. In the majority of patients the cause of anemia is a chronic disease e.g. occult blood loss or renal failure. Anemia is of particular importance as elderly patients with anemia are at higher risk for circulatory and oxygenation problems hallmarked by fatigue, dyspnea, paresthesia (that are often attributed to elder age and, therefore, is not treated.)

The area of gas exchanging alveolar surface is also decreased, leading to a decrease in arterial oxygen tension by 4 mmHg per decade; this process results in latent hypoxia. Hypoxia is often associated with cognitive problems (that are further aggravated by the side effects of medicines used commonly).

2. Increase in blood glucose levels

Serum glucose levels increase proportionally to age, while glucose tolerance is decreasing. The reference range of fasting glucose is wider in the elderly (3.9 –

6.7 mmol/l). However, blood glucose levels are often low due to decreased body weight and dietary problems. Simultaneously, serum insulin levels also increase indicating insulin resistance; this is responsible for impaired glucose tolerance observed in up to 25% of patients above 75 years. Therefore, postprandial blood glucose levels are often higher when performing an oral glucose tolerance test (upper limit = $5.5 \text{ mmol/l} + [\text{age in years}/18]$).

3. Increased erythrocyte sedimentation rate (ESR)

The ESR is increasing proportionally with age (in general by 0.22 mm/h per year above 20 years of age), but its exact cause is not known. Therefore, the upper limit of reference range in the elderly is 40 mm/h and 45 mm/h in males and females, respectively. (The contribution of the common occurrence of systemic inflammation in the elderly to high ESR is not fully clear. One should remember not to use ESR as a basis of diagnosis of inflammation in the elderly.)

4. Decrease of iron levels and stores

Serum iron levels decrease in the elderly, probably due to impaired production of gastric juice. Simultaneously, iron stores decrease also. The other common cause of low iron levels and systemic iron deficiency is chronic blood loss; therefore, malignancy should be searched for.

5. Increase of total cholesterol and triglyceride levels

Total cholesterol levels increase by up to 1 mmol/L in 60 years of age. No further elevation is anticipated thereafter; rather, in very old subjects the level of this analyte decreases. Triglyceride levels increase by 30 and 50 per cent in males and females, respectively, between 30 and 80 years of age. HDL-levels increase somewhat in aged men, while decrease in aged women.

6. Decreased renal function

In general, aged people take several medicines simultaneously. The metabolites are partly excreted via the kidney. Therefore, it would be of utmost importance to assess renal function to establish optimal dosage. In the elderly the number of functioning nephrons decreases by 30 – 45%; this is accompanied by the decrease of glomerular filtration rate. However, creatinine levels change rarely, as the lean body mass decreases. Therefore, net BUN and creatinine levels are not appropriate to estimate renal function; instead, eGFR calculation is required that incorporates patient's age.

7. Low albumin levels

Simultaneously with aging the level of some specific proteins, particularly that of albumin decrease (leading to a decrease of total protein levels). This is partly due to impairment of liver functions and an inappropriate diet. As albumin is the major carrier protein in blood, you should not be surprised, if a patient with low albumin levels presents with low calcium or hormone levels.

8. Thyroid function impairment is common

Hypothyroidism is not an inevitable consequence of ageing; however, it is a quite common phenomenon in aged patients (of note, its signs and symptoms include weakness, slowness and tiredness that are falsely attributed to old age). Therefore, it is recommended to screen patients' TSH levels. Roughly, TSH reference range is comparable to that in younger age. One should remember that medicines used commonly in old patients may influence thyroid hormone levels (eg. Glucocorticoid hormones suppress TSH, while lithium inhibits thyroxine secretion).

DISCUSSION & CONCLUSION :

1. Ageing is associated with an accumulation of cellular and molecular changes that impair normal physiology.
2. Impairment of normal physiological functioning of cells, tissue, organs and bodily systems, in turn triggers age-associated diseases, and
3. Ageing itself is a risk factor for other diseases.
4. As lab values altered due to changes in physiology or due to a disease in elders, so one should never establish a diagnosis exclusively on laboratory test results. Instead, laboratory test results can be used as an aid and prior results along with clinical history should be always considered.
5. Advise only few laboratory tests as physician can, because there is more risk false positive result is increased.
6. Laboratory tests performed to improve physicians clinical decision making.
7. So, laboratory investigations are most important for screening as well as for diagnostic purpose in geriatric disorders. These health screening and tests can increase life expectancy by choosing safe & specific management and healthy lifestyle.

REFERENCES:

1. <http://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5746841>.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5732407>.

ROLE OF TRIDOSHAS IN JARAJANIT VYADHI

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Introduction

Ayurveda is the oldest living philosophical based medical science which is still being practiced widely to day. Ayurveda is not only science of therapeutics but it advocates more of promotion of health and prevention from diseases than cure. It is a philosophy of life which leads to long, happy, healthy and prosperous life. According to Acharya Charak the knowledge which deals with what is good or right and what is not or wrong which leads to happiness or misery of life and measurement of life span is called as Ayurveda. The person is called as healthy if his or her doshas are in balanced (equilibrium or homogeneous) state, agni (power of digestion and metabolism) is in proper stage, Dhatu (tissue elements), Mala (waste product of body) ant Dhatu Parinama are in the balanced state, happy and balanced state of soul, sense organs and mind.

Material and Method

Ayurveda literature – mainly bruhadtaryee like Charak Samhita, Sushrut Samhita and Astanghridayam.

Discussion

Acharya Vagbhatta has explained eight branches of Ayurveda. There are Kaya, Bala, Graha, Urdhvang, Shalya, Dranshta, Jara and Vrushan. In above jara is on seventh number.

Jara word derived from the root “जृञ् जृञ्जते” explained as – a) “vayah kriya slathamamsadyavastha vishesha” meaning loosening of muscle and other tissues under the influence of ageing. B) in Sabda kustubha the word “Jara” has been defined as “shaithilya apadakavastha” also conveying the same import. Different synonyms described in Sanskrit literature like Sthavir, Vistrasa, Vruddha, jeen, jeern, pravay, jarit etc.

Jara as Swabhavika Vyadhi. It is included in Adhyatmika, Adhibhautika and Adhidaivika.

In Ayurvedic literature, Vagbhata and Sharangdhara emphasised progressive deterioration of bodily features decade-wise. In example Manah and Karmendriya Kshaya will originate in ninth decades.

Charaka, while describing Dharupaka encapsulated the continuous degenerative process occurring in the human body in the statement. “Nimeshakaladbhavanam...” Susruta expressed a similar view while discussing quantities of various Dhatus etc- He elaborated that “Giving the exact quantity of volume of bodily components is impossible, owing to the ever changing internal environment.”

Transformation is the hallmark of time. everything that is leaving undergoes various changes before it is worn out completely. This cycle of changes is known in Ayurveda as “Parinama” which takes place under the constant influence of “Kala” of the time factor. In other words, Kala is responsible for Parinama. Jara, being a Swabhavabala Pravritta Roga, occurs due to the above mentioned Vyadhihetu called Kala/Parinama.

The components of ID Ayurveda are Shareera, Indriya, Satwa and Atma. Just like the root of a plant is very important for its maintenance, stability and growth. In the same way doshas, Dhatus and Malas are also very important for maintaining the human body. If the root is spoiled then the tree can not grow properly, similarly if doshas, Dhatus and Malas gets vitiated by ahita ahara and viharas then body mechanism gets disturbed and diseases started in the body. The Doshas, Dhatus and Malas sustain the body in collaboration and coordination with accessory components such as Srotas, Dhamanis, Various Indriyas etc. Obviously, their Samyavastha is deranged in Jaravastha.

Doshas

Doshas- Doshas are the both structural and functional units of the body protective system. Sharirika Dosha are there in number viz. vata, Pitta and Kapha. They protect the body as long as they are in Samyavastha (homogeneous state) and make it disease or sick when they get vitiated. “Te Vyapinoopi Hradnabhyoradho madhyordhvasanshrayaaha”- though they are circulated throughout the body continuously and constantly but Vata is mainly seated below the nabhi, pitta in between nabhi and hridaya and Kapha above the hridaya. Usually vata is predominant in old age, in the evening, in the late hours of the night and at the end

of digestion. Pitta is predominant in youth, middle age. One third of the night and one third of the day and during digestion. Where as kapha will be more in childhood, early in the morning, early hours of the night and immediate after meals.

Vata Dosha

Vata is the most important factor to be considered in old age, obviously because of its natural predominance at the stage of life. Since vayu is the “Niyanta” or that which governs the coherence of the components of Ayu such as Shareera, Indriya, Satwa and Atma, Vayu itself maybe called Ayu. Vayu, is the dynamic factor activities of life process like 'Gati' and 'Gandhana' I.e. motor and sensory functions which are the indicators of life.

The inherent qualities ascribed to Vata in various Samhita Granthas are: Ruksha, Laghu, Sheets, Khara, Sukshma, Chala, Visada, Daruna, Anavasthita, Parusha, Amoorta, Bahu, Sheegra, Avyakta, vyaktakarma, Rajobahula, Yogvahi, Anushnasheeta, Tiryagga, Sparshavan, Sabdavan, Achintyaveerya, Doshanam Neta, Rogasamuharat, Ashukari, Muhuschari etc. Karma"s attributed to Vata which are observed to be deteriorated in Jara. Utsaha, Uchwasa, Niswasa, Chesta, Dhatunamsamagati, Malanissarana, Tamtrayantradghara, Nanavidh achesta pravartanam, Manoniyamana, Manahpreranam, Indriya udyojana, Sarvadh tuvyuha, Indriyarthabhivahana, Sareerasandhanam, Vakpravartanam, Harshotsaha jananam, Agnisandhukshanam, Doshasamsodhanam, Malakshapana, sthaulonous rotobhedanm, Ayushonuvartanam, Vikshepa, praspandana, Udvahanam, Purana and Viveka.

The karma"s affected in old age by Pranavata are- Manoniyamana, Manoprerana, Sarvendriyayojna, Swasa, Uchwasa, Niswasa, Udgara, Aharana, Stheevana, Kshvathu, Praspandana, Ayushonuvartanam, Utsaha, Purana. The karma"s affected by Udanvata in old age are- Urja, Balam, Vakpravriti, Prayatna and Varna. The karma"s affected by Samanvata in old age are- Srotoavalambana, Agnibalapradana, Annapachana, Annadharana, Kittaadhonayana and Rasamaladivivechan. Vyanvata affected in the old age as- Gati, Prasaranam, Akshepa, Nimesha, Unmesha, Nanavidhachesta Pravartanam. The karma"s affected by the Apanvata in old age are Sukrosarga, Mutrotsarga, Artavotsarga, Garbhotsarga, Pureeshotsarga, Malamoksha, Malakshepanam. The other Karma of Vayu which also responsible in old age like Sramsa, Dhramsa, Vyasa, Sanga,

Bheda, Sada, Toda, Ruk, Parushya, Sosha, Supti, Stambha, Vislesha and Sankocha.
It is evident from the above

instances that Vata Dosha is the governing entity for both the maintenance of bodily process and their destruction in old age and disease.

Pitta Dosha

Pitta

Pachakapitta and Agni

“Rogah Sarveepi mandeegnau...”. Kayagni also known as Jatharagni is the chief source of the other Agnis such as Bhootagnis and Dhatwagnis. The functions attributed to Agni can be summed up as- Pachan, Parinama and Pravritti. The Samyavastha of this Jatharagni ensures the equilibrated State of Dhatuagnis and Bhootagnis together responsible for assimilation, growth and life itself. Factors dependent on Agni are- Ayu, Varna, Bala, Swasthya, Utsaha, Upachay, Prabha, Ojas, Tejas, Prana. As Vayu is physiological increased in the aged, it usually influences, among other things, the Agni as well. Vata, is known for its Vishamata or erratic nature. On the same analogy, it can be inferred that in old age, which is under the influence of Vata, Vishamagni, naturally prevails.

Vishamagni in this context means the state of fluctuating Agni, moving in between hyper and hypofunctional states. In other words Agni which is not sama is vishama. In Manda state, Agni results in the formation of Ama. It is the improper formation of the first Dhatus, called Dushtarasa. When Vishamagni tilts towards Teekshnatva, it results in Dhatusosha, since the proportion of food needed for tissue maintenance is obviously burnt. In old age, this Vishamagni has 2 adverse effects. First is deterioration of Bhootagnis and Dhatwagnis governed by it. Second is qualitative impairment of the Adya Dhatu Rasa which loses its function of Preenana. The five Pittas and their karma also affected in old age. The karma's affected by Pachak pitta are – Annapachana, Kshut, Ujas and Ruchu. The karma affected by the Ranjak pitta is Ojas in old age. The karma affected by Sadhak pitta in old age are- Budhi, Medha, Sourya and Arogata. The karma's of Alochak pitta affected as Rupagrahana. The karma of Bharajakpitta affected in old age are- Chaya prakashana, Dehamardavam and Prabha.

Kapha Dosha

Sleshma

Kapha, also known as Sleshma is the binding agent in the body. This is clear from its Nirukti “Slis Shalingane”. Meaning that which embraces or binds. The other term kapha denotes the fluid nature of kapha. Binding mechanism and fluid supply are deranged to a large and it’s implications is tabulated below.

The main functions of Kapha are Ambu Karma, Upalepa, Sandhibandhan, Brimhan, Purana, Snehan, Ropan, Tarpan, Balakrit, Sthairya krit and Vrishya. The karmas affected in old age by Avalambak Kapha are – Trikavalambanam, Balam, Dhruti, Utsaha, Buddhi, and Purana. The karma affected in old age by Tarpak kapha is Indriyatarpan. The karmas Affected by the Sleshak kapha in old age are

Asthisandhisleshanam, Baddha, Sthiratwa and Sandhisthairya. The Bodhak kapha affected as Rasabodhana karma in old age. And the Kledak kapha is affected in old age by the Ama Kledan karma. The anabolic and preservative nature of kapha is deranged in geriatric problems.

The Kshaya lakshan of Kapha are Bhrama, Sleshmasayashoonyata, Hridayadrava and Slathasandhita. “Prakritastu Balam Sleshma”. Sleshma in its physiological state, also represent the potential source of strength and resistance to disease and resistance of disease and decay. This Bala is also known as Ojas.

Conclusion

According to above explanation we can say that Tridoshas are play most important role in to the manifestation of the Jara jannya Vyadhi.

REFERENCE:

- 1) Charak Samhita
- 2) Astanghridayam
- 3) Sushrut Samhita

A REVIEW STUDY OF ALZHEIMER'S DISEASE AS A JARA ROGA IN AYURVEDA

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Abstract:

Ayurveda is a science of life. It has eight branches. "Jara Rog" is one of them. It literally means- Geriatric disorders. Alzheimer's disease is one of the Geriatric disorders. Alzheimer's is a disease that refers to the developing deterioration of the brain. Slow and steady loss of memory, poor cerebral ability, mental deterioration and change in personality are generally the predominant symptoms connected to the disease. According to the principles of Ayurveda, learning of knowledge is a result of successive and complex interaction and coordination of Atma (soul), Indriyas (cognitive organs), Mana (psyche) and Indriyarthas (sense organs). The functioning of these factors is governed by Tridosha (Vata, Pitta and Kapha) and triguna (Sattva, Raja and Tama) in a specific coordination and balance. Any disturbances in these Tridosha and triguna will cause disordered functioning of Indriya, Mana and Buddhi leading to impaired memory-gradually to Alzheimer's disease.

Keywords:- Ayurveda, Jara Rog, Alzheimer's disease, Geriatric Disorder.

Introduction:

Ayurveda is a science of life. It has eight branches viz, Kaya, Bala, Graha, Urdhwanga, Shalya, Danshtra, Jara, Vrushan. "Jara rog" means Geriatric disorders. Aging is a natural process; the body is decaying continuously, as shown by its etymology, that is, Shiryate tat shariram. Ayurveda has a holistic approach towards all the miseries of man and aging is one of this.

Jara rog is classified as one of the natural i.e. Swabhavbalapravrutta and palliative i.e. Yapyaya disease. It is the process of becoming old and decaying. As the age advances, several changes take place in the body, in the external appearance, in the

condition of Dosha, Dhatu, Mala, Agni, Oja and so on, as well as in the mental and cognitive functions.

Alzheimer's disease is one of the most common geriatric disease. Alzheimer's is a disease that refers to the developing deterioration of the brain. Ayurveda says learning of knowledge is a result of successive and complex interaction and coordination of various factors which are governed by Tridosha and Triguna. Any disturbances in these will cause problems in the functioning of Indriya, Mana and Buddhi leading to impaired memory.

Material :

Alzheimer's Disease-

It is a disease that refers to the developing deterioration of the brain which affects CNS. It is the most common form of dementia. Although this disease develops differently for every individual, there are many common symptoms like manifestation of stress, irritability, confusion, short term memory loss, aggression, trouble with language, gradually long term memory loss, mood swings etc. As the person's condition declines, they often withdraw from family and society. Gradually, bodily functions are lost, ultimately leading to death.

The incidence rates per 1000 person-years for AD was 11.67 (95% CI: 10.9-12.4) for those aged ≥ 55 years and higher for those aged ≥ 65 years (15.54, 95% CI: 14.6-16.5).ⁱ Ayurvedic view-

According to Acharya Sharangdhara in the 1st decade, Balyavastha (infancy) will be diminished, in the 2nd decade Vridhhi (growth), in the third decade Chhavi (complexion), in the fourth decade Medha (intellect), in the 5th decade Twak (skin), in the 6th decade Drishti (vision), and so on.ⁱⁱ Acharya Charaka has clearly mentioned that "vitiation of any substance has specific cause and it is responsible for the vitiation of body elements."ⁱⁱⁱ Vitiation is always based on vitiates; Rasa Vagbhata has said that Jara Avastha appears because of Pantha (excessive walking or traveling), Sheetam (cold or frozen food), Kadanna (food articles which are devoid of Jeevaniya properties), and Manas Pratikulata (improper condition of mind).^{iv} All these causes are responsible for Akalaja Jara or early aging. Some other causes found regarding Kalaja Jara are Kala (time factor), Swabhava (nature), and Karma Swabhava. During Jara, symptoms of vitiation of Vata are seen. Alzheimer's disease dominantly caused as a result of the imbalance of Vata Dosha.^v

According to Ayurveda, learning or acquisition of knowledge is a result of successive and complex interaction and coordination of Atma, Indriya (cognitive organs), Mana (psyche) and Indriyarth (sense organ)^{vi}. The functioning of these factors is governed by Tridosha (Vata, Pitta, Kapha) and Triguna (Sattva, Raja, Tama) in a specific coordination and balance which is explained as follows:

Vata Dosha is responsible for proper functioning of Buddhi, Indriya and Manavi. Pitta Dosha enhances Medha. Kapha Dosha nurtures Dhee, Dhriti and Smriti and balance position of these gives proper strength to body and the mind.

Charaka Samhita narrate 8 factors for improving the memory as Nimitta (knowledge of cause and effect), Rupa Grahanat (knowledge of form), Sadrushya (Knowledge of similarity), Saviparyayat (knowledge of contrast), Satvanubandha (concentration of mind), Abhyas (repetition), Dnyan Yoga (Attainment of metaphysical knowledge) and Shrutat (subsequent partial communication, repeated practice) which eventually improves Smriti.

Various Acharya mentioned that Kala or Parinama is the prime cause for the initiation of the disease. Any disturbance in these Tridosha and Triguna will cause disordered functioning of Indriya (cognitive and motor organs), Mana (Psyche) and Buddhi (Intellect) leading to impaired memory and other related symptoms. This imbalance is quite common as a person being grow in age which can be correlated with Alzheimer's Disease.

Diagnostic aspect of Alzheimer's Disease as per Ayurveda-

Depending upon the symptoms exhibited by the patient diagnosis should be done.

| <i>Prashna Pariksha</i> | <i>Darshan Pariksha</i> |
|---|--------------------------------|
| Smrutinash (loss of memory) | Irritability |
| Weakness in perception of subjects | Aggressiveness |
| Mood swings | |
| Wandering | |
| Depression | |
| Loss of concentration in daily activities | |

General Treatment Plan-

Ayurvedic drugs can help in the management of Alzheimer"s by making these Tridosha and Triguna in a well balanced state and also by providing Medhya (intellect promoting) effect to improve the memory of the patient. Along with the drugs Satvavajayaviii treatment can help in the management of this disorder. This disease affects in old age, so Basti will be more beneficial. Rasayanaix, Shirodhara and Shiropichu are also beneficial.

Discussion-

The normal functioning of the Indriya, Mana and Buddhi is carried out by proper coordination of the Tridosha and Triguna, which also controls various factors which are responsible for specific coordination and retention of memory. Any disturbances in this factors will lead to impaired memory which can be correlated with Alzheimer"s Disease.

Conclusion-

Alzheimer"s Disease is not clearly mentioned the Ayurvedic texts but can be correlated by understanding the general mechanism of Tridosha and Triguna. It can also be diagnosed and treated with the knowledge of Ayurveda.

REFERENCES-

1. <https://pubmed.ncbi.nlm.nih.gov/23287326/#:~:text=The%20incidence%20rates%20per%201000,CI%3A%2014.6%2D16.5>
2. Sharangadharacharya. Sharangadhara Samhita, Purva Khanda, 6/62. 4th ed. Varanasi: Chaukhambha Orientalia; 2000. p. 77
3. Charaka Samhita, Sutra Sthana Chikitsa Prabhutiyam Adhyay, 16/27; p. 97.
4. Vagbhata Acharya. Rasa Ratna Samucchya, Jararoga Chikitsa, 26/2. 5th ed 1978. [Google Scholar] Tripathi Dr Indradev. Varanasi: Chowkhamba Sanskrit Series Office; p. 452
5. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3611658/>
6. Charaka Sharirasthana 1/22-23
7. Charaka Sharirsthana 4/34
8. Charaka Sharirasthana 1/143-146
9. Cha.Sa.Chikitsa Sthana1/1/7-8

LAB INVESTIGATION IN GERIATRIC DISORDERS

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ABSTRACT:

India has nearly 120 million elderly people with various physical, psychosocial, economic, and spiritual problems. The physiological changes caused by aging interfere significantly with the function of organs and systems, which is reflected in the results obtained in laboratory tests. Thus the correct interpretation of these tests depends, more directly than in young, on the analysis of the clinical, functional and social characteristics of each patients.

Keywords: Aim of lab investigation in geriatrics, diseases, common investigations, factors affecting, charak samhita, bhaishajya ratnavali.

AIM OF LAB INVESTIGATIONS IN GERIATRICS

Geriatrics the word derived from the greek word “geron” means old man. Gerontology is the study of aging process so that Geriatrics is specialty of health care of elderly people.

Laboratory investigations in geriatrics provides guidance in planning care for elderly patients. The goal of lab assessment includes

1. Reduction of health care cost
2. Early recognition & treatment of geriatric syndromes

3. Improved survival & quality of life for patients.

There are some limitations in correct values of laboratory investigations for geriatrics as many of normal reference ranges are of 20 to 40yrs of adult which is directly compared with aged one.

COMMON CONDITIONS (DISEASES) IN GERIATRICS¹

India has 120 million elderly people with multiple physical, social psychological, and economic problems with unmet needs in all domains of health. If we look at the physical and psychological domain, we have the following figures from the previous studies conducted in India.

3.7 million suffer dementia

40 million suffer from poor vision

1.6 million annual stroke

cases 1 in 3 suffer from

arthritis

1 in 3 has hypertension

1 in 5 has diabetes

1 in 5 has auditory problems

1 in 4 suffer from depression

1 in 10 falls and sustains a fracture

1 in 3 bowel disorder

Cancer is 10 times more common.

In addition, that Indian elderly face several social issues such as loneliness, elder abuse, neglect, lack of income security, and poor access to health care.

DIFFICULTIES IN DIAGNOSIS OF GERIATRICS DISORDERS BY LAB INVESTIGATIONS

Many of the common reference values for biochemical and hematological tests are determined in young and healthy adults between the ages of 20 and 40 years. This means that their laboratory test results are compared with those from patients twice as old who have undergone around 40 years of physiological aging.

The validation of reference values for the three groups of young old, old and very old is a challenge in itself, because elderly people in perfect health are a rare species; most of them have health problems and are under regular medication. Therefore, it takes great effort to conduct reference value studies for this age group.²

FACTORS AFFECTING LAB TEST RESULTS IN GERIATRICS 3

As aging is a physiological process where there are continuous steady changes occurs in body that is why the reference range for lab test may vary from young to adults.

These are some factors which may affect biochemical and hematological changes in geriatrics=

1) Physiological changes :-

- Decreasing Gonadal hormones level
- Increase in bone loss
- Impairment in renal function
- Increase in blood fat levels.

2) Life style modifications :-

- Inactivity of body compartments
- Decreasing muscular mass
- Less supply of vit D

3) Dietary factors :-

- Problems with digestion & absorption.
- Dental problem leads insufficient intake of vitamins rich food
- Alcoholism & obesity

4) Medicinal therapy:-

- Many elderly are on Medicinal therapies due to co-morbidities may cause abnormality in some lab tests

SOLUTION TO DIFFICULTIES

- 1) The evolution of reference value in geriatric population in compliance with the regulation of the European guidelines was recently highlighted by OZARDA et. al.⁴
- 2) Several well planned & comprehensively performed studies were published in the last decade showing that many of the routine parameters seem to be valid in elderly, too ⁵

COMMON INVESTIGATIONS IN MALE & FEMALE GERIATRICS 6

1) HAEMOGLOBINE

In the elderly, the impairment of the intestinal absorbance of iron and vitamin B12 may lead to a decrease in hemoglobin and erythrocyte synthesis. Occult blood loss is also common. Therefore, it is recommended to decrease the lower level of reference range of hemoglobin (e.g. 115 g/l and 110 g/l for males and females, respectively).

Anemia is of particular importance as elderly patients with anemia are at higher risk for circulatory and oxygenation problems hallmarked by fatigue, dyspnea, paresthesia.

The area of gas exchanging alveolar surface is also decreased, leading to a decrease in arterial oxygen tension by 4 mmHg per decade; this process results in latent hypoxia. Hypoxia is often associated with cognitive problems.

2) BSL

Serum glucose levels increase proportionally to age, while glucose tolerance is decreasing. However, blood glucose levels are often low due to dietary problems. Simultaneously, serum insulin levels also increase indicating insulin resistance; this results in impaired glucose tolerance observed in up to 25% of patients above 75 years. Therefore, postprandial blood glucose levels are often higher when performing an oral glucose tolerance test.

3) ESR

The ESR is increasing proportionally with age (in general by 0.22 mm/h per year above 20 years of age), but its exact cause is not known. Therefore, the upper limit of reference range in the elderly is 40 mm/h and 45 mm/h in males and females,

respectively. One should remember not to use ESR as a basis of diagnosis of inflammation in the elderly.

4) SERUM IRON LEVELS

Serum iron levels decrease in the elderly, probably due to impaired production of gastric juice. Simultaneously, iron stores decrease also. The other common cause of low iron levels and systemic iron deficiency is chronic blood loss; therefore, malignancy should be searched for.

5) LIPID PROFILE

Total cholesterol levels increase by up to 1 mmol/L in 60 years of age. No further elevation is anticipated thereafter; rather, in very old subjects the level of this analyte decreases. Triglyceride levels increase by 30 and 50 per cent in males and females, respectively, between 30 and 80 years of age. HDL-levels increase somewhat in aged men, while decrease in aged women.

6) RENAL FUNCTION

In general, aged people take several medicines simultaneously. The metabolites are partly excreted via the kidney. Therefore, it would be of utmost importance to assess renal function to establish optimal dosage. In the elderly the number of functioning nephrons decreases by 30 – 45%; this is accompanied by the decrease of glomerular filtration rate. However, creatinine levels change rarely, as the lean body mass decreases. Therefore, net BUN and creatinine levels are not appropriate to estimate renal function; instead, eGFR calculation is required that incorporates patient's age.

7) TSH

Hypothyreosis is not an inevitable consequence of ageing; however, it is a quite common phenomenon in aged patients i.e. its signs and symptoms include weakness, slowness and tiredness that are falsely attributed to old age. Therefore, it is recommended to screen patients TSH levels.

Roughly, TSH reference range is comparable to that in younger age. One should remember that medicines used commonly in old patients may influence thyroid hormone levels eg. Glucocorticoid hormones suppress TSH, Lithium inhibits thyroxin secretion.

SPECIFIC LAB INVESTIGATIONS IN MALE AND FEMALE 7

| Lab investigations in geriatrics male | Lab investigations in geriatrics female |
|--|--|
| <ol style="list-style-type: none">1. PSA increase in levels in geriatrics2. TESTOSTERON | <ol style="list-style-type: none">1. FSH usually increase than young2. LH usually increase than young3. ESTRADIOL decreased in elderly females |

RELATIVE SPECIAL LAB INVESTIGATIONS IN GERIATRICS 8

| Values increased in Geriatrics | Values decreased in Geriatrics |
|---|--|
| <ol style="list-style-type: none">1) Alkaline phosphate2) ANA3) Fibrinogen4) FSH, LH5) GGT6) Serum uric acid7) IL-68) PSA9) Sr. Cholesterol10) Insulin | <ol style="list-style-type: none">1) Aldosterone2) Vit. B12, vit. D3) Sr. Ferritin4) HDL5) Sr. Calcium6) Creatine clearance7) GH8) Estradiol9) Free testosterone |

CONCLUSION:

India has nearly 120 million elderly people with various physical, psychosocial, economic, and spiritual problems. While the functionally and cognitively fit can access usual health-care facilities provided by the government, these people need active aging program to keep them independent. Health ministry has created geriatric centers and geriatric clinics in most of the states; however, these centers may not serve the functionally and cognitively impaired elderly. There is great need for mobile units, day-care centers and hospices, and need for training of personnel in home nursing. Routine care clinics cannot handle the burden of

geriatric population to address their multi-morbidity and several other age-related problems.⁹

Ayurveda explained Rasayan Prakaran in Bhaishajyaratnavali and Rasayan Adhyay in Charak Samhita Chikitsa Sthan which helps to give quality of life to geriatric patient and prolonged oldness.

[illegible]

The rasayan is medicine which destroys oldness of people.

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While explaining importance of Rasayan in rasayan Adhyaya of Charak Samhita it is stated that people/monks who consumes Rasayan daily were lived long life without any disease and deability.

REFERENCES:

- 1) <https://www.amhsjournal.org/text.asp?2017/5/1/112/208215>
- 2) <https://www.degruyter.com/document/doi/10.1515/labmed-2018-0087/html>
- 3) Page no. 329, The journal of the international federation of clinical chemistry and laboratory medicine, Lab test findings in the elderly, Author-Barna Vásárhelyi¹, Lóránd A. Debreczeni²
- 4) Ozarda Y, Higgins V, Adeli K. Verification of reference intervals in routine clinical laboratories: practical challenges and recommendations. Clin Chem Lab Med 2018. <https://doi.org/10.1515/cclm-2018-0059> Search in Google Scholar
- 5) Adeli K, Higgins V, Nieuwesteeg M, Raizman JE, Chen Y, Wong SL, et al. Biochemical marker reference values across pediatric, adult, and geriatric ages: establishment of robust pediatric and adult reference intervals on the basis of the Canadian Health Measures Survey. Clin Chem 2015;61:1049–62. Search in Google Scholar

- 6) Page no. 328, The journal of the international federation of clinical chemistry and laboratory medicine, Lab test findings in the elderly, Author-Barna Vásárhelyi¹, Lóránd A. Debreczeni²
- 7) Pg. no330, The journal of the international federation of clinical chemistry and laboratory medicine, published 19 Dec 2017
- 8) The journal of the international federation of clinical chemistry and laboratory medicine, published 19 Dec 2017
- 9) <https://www.amhsjournal.org/text.asp?2017/5/1/112/208215>
- 10) Page no. 1102, Rasayan prakaran, bhaishajya ratnavali, edition 2016, Shri Ambikadatt Shastri Ayurvedacharya, chaukhamba Prakashan, edition 2016
- 11) Page no. 15-16, rasayan Adhyaya, Charak Samhita Chikitsasthan Uttarardha, Acharya Priyavat Sharma, Chaumkhamba Sanskrut Prakashan

MANOVAHA SROTHOVIKARA IN GERIATRICS

Concept of ageing (Jara) in Ayurveda:

Ageing is a universal, intrinsic, progressive and deleterious process. Ayurveda has described the concept of ageing as „Jara“. Definition of Jara „Vayah Kruta Shlatha Mamsadyavastha Vissha“ which means loosening of muscles and other tissues under the influence of aging. “Jara” is defined as the phenomenon of becoming old by the act of wearing out. It is synonymic as “Vardhakya” means increasing of age. According to Ayurveda, ageing is the outcome of Swabhavabala pravritti vyadhi diseases which are produced by the diminished strength of natural factors such as Kshudha (death), Nidra (sleep) etc.

Definitions of aging indicate that it is a progressive process associated with declines in structure and function, impaired maintenance and repair systems, increased susceptibility to disease and death, and reduced reproductive capacity. The word Geriatrics too is derived from Latin word “geras” meaning “to grow old”.

Acharya Sushruta has categorised the Swabhava Balapravrutta Vyadhi"s into 2 types i.e. Kalaja jara (occurring on time) and Akalaja (occurring on untimely) Jara. There are so many internal and external factors which contribute for premature aging with factors like Aharaja, Viharaja, Manasika nidanas .Inclusion of Jara chikitsa as one among the Ashtanga Ayurveda during those good olden days implies the foresight of our Acharyas like Charaka ,Susrutha ,Vagbhata and Sarangadhara on its importance.

Acharya Sharangdhara has narrated decade wise decline conditions- In the first decade, Balyavastha (infancy) will be diminished, in the second decade Vridhhi (growth), in the third decade Chhavi (complexion), in the fourth decade Medha (intellect), in the fifth decade Twak (skin), in the sixth decade Drishti (vision), and so on. It indicates that continuous catabolic changes are taking place in the body and it happens because of degradation of body elements (Paramanu Vibhaga).

Jara is described as Swabhavika vyadhi by Maharshi Charaka and Maharshi Sushruta as well. Acharyas have explained that Vriddha avastha starts almost after sixty years. In this stage, Sharira dhatu, as well as Drishti, Shukra, Vikrama, Karmendriya continuously gets deteriorated.

Acharya Charaka has clearly mentioned that "vitiation of any substance has specific cause and it is responsible for the vitiation of body elements.

Acharya Vagbhata has quoted that Jara Avatha appears because of Pantha (excessive walking or traveling), Sheetam (cold food), Kadanna (food articles which are devoid of Jeevaniya properties), and Manas Pratikulata (improper condition of mind). All these causes are responsible for Akalaja Jara or early aging. Some other causes found regarding Kalaja Jara are Kala (time factor), Swabhava (nature), and Karma (action) Swabhava.

Features of jara as per mentioned in classical texts are Sharira shakti heena (regression of physical capacities) Smiriti naasha (diminishing memory), Manasika glani (loss of cheerfulness and alertness), Balinam (appearance of wrinkles), Palitya (greying of hair), Danta shaithilya (loosening of denture), Swabhava vaiparya (change in personality components), Kasa swasa pravritti (prone to get repeated coughs and dyspnoea on effort), Sarva kriya asamarthata (loss of physical, perceptual and mental faculties).

Manovaha srotha vikara in Geriatrics

Manas is the controller of all Indriyas, but Manas in turn regulated by Vata. The process of ageing is gradual as the accumulation (samcaya) of waste forms of (mala-roopa) pitta and kapha is a gradual phenomenon. The mental or psychic factor plays a vital role in controlling this process. The persons affected with intense grief (Shokha), anger (krodha), stress etc are more quickly prone to ageing process. If we minimize the impurities of the mind by purification methods like yoga, meditation, yogic breathing exercises (pranayama) etc., the speed of ageing can be delayed.

Out of the diagnostic factors in ayurveda, vayah (age) is one of the most important one. Vriddhavastha is considered as in between sixty to hundred years according to Charaka and above seventy years is Vriddhavastha according to Maharshi Sushruta. According to Acharya there is decrease in sensory powers, potency, veerya, pourusha, Parakram (activities), grahan Shakti (digestion), dharan Shakti (observing power), smaran shakti (memory), vachan shakti (communication skills) etc in this age. Different psychosomatic disorders occur in the elders, but mood changes occurs more as compared to physiological ailments. So we have to handle old age carefully as we care for our children. Manas is one of the eleven Indriya Sreshtha & Ubhaya indriya as well. It is formed by Rajashika and Vaikarika

Ahankara as per Maharshi during the Srishti utpatti i.e. formation of Purusha. According to Maharshi Sarangadhara, continuous catabolism also occurs with respect to a single decade. So in sixth decade and above the “Drushti, Shukra, Vikram, Buddhi, Karmendriya and lastly Chetana Shakti” gets deteriorated. Maharshi Sushruta also said that the old age is “Jara and Pakwa”. The Dosha which predominates in old age is the “Vata dosha” as per our classical text. Mana is also controlled by Vata dosha (Niyanta praneta cha Manasha). Basing on these concepts we can briefly go through the different mental conditions and its treatment through Ayurveda aspects.

Anutwa & Ekatwa are the Guna of Mana & the functions are “Indriyabhigraha, Swashya nigraha, Uha paha and Vicharascha”. The vishaya of Mana are “Chinta, Vichar, Uhya, Dhyeya, Sankalpa”. So initially these Vishaya Vighatana occurs in old age due to intake of unwholesome ahara and by performing unwholesome vihara, especially manshika nidana. Due to which the Sangyavaha Srotas and Hridaya gets vitiated so normal psychological process of thinking, analysis of any matter, determining good or bad, concentrating anything make promise changes and takes up a toll in old age.

It implies that Indriyas are regulated by Vata through Manas. In Vriddha avastha physiological aggravation of Vata affects the normal functioning of Indriyas. The role of Vata in the interplay of Indriyas is evidenced by the functions like Sarvedriyarthabhivahana, Sarvendriya yojana and Indriya tarpana etc., and its pathological influence in relation to aging is also mentioned under the heading of Indriyapradoshaja vikara.

For example - Sarvendriya sunyata - Seen in Pranavrita udana vata; Sarvendriya upaghata in Pranavrita vyana vata; Indriyavadha in Vata prakopa; Akshi glani in Mamsa kshaya, Indriya dourbalya in Pitta vriddhi etc., Indriyahani (loss of senses) is a prominent feature encountered in Geriatric patient. Therefore the roles of the Doshas in their maintenance and their Vikriti (derangement) have been considered. Vata, being the supreme controller of the body not only shows its influence at physical and physiological level but also at psychological level i.e., it regulates the smooth functioning of Manas or Mind. As the key element of the body i.e., Vata is vitiated physiologically in Vriddhas, it directly or indirectly disturbs the dual roles of Manas (Ubhayatmaka). Manas being the Ubhayatmaka work as relay station in between Cognitive and Co native organs, in other sense in between external and internal world. Ideally, the Manas should be Satwa pradhana

for it to gain the ability to sustain emotional assaults. Most of the psychiatric problems develop due to Alpa satwa. That's why elderly age is considered so sensitive as childhood.

Due to Vata prakopa, satwa declines with age, leading to decrease in its normal powers of Grahana, Dharana, Vachana, Smarana and Vijnana and susceptibility to other Vikaras by the Doshas such as Pralapa due to Vata; Manobhramsa - Udanakopa; Bhaya Shoka Dainya - Vata prakopa etc., This accounts for the increasing incidence of dementia, delirium and depression with advancing age.

In this jara age, Manashika Bhava gets more fluctuates than Sharira, as Vayu is generally dominant in this age & Manas is controlled by Vata dosha. Mainly depression and disturbances in emotions, impaired memory, rigidity of outlook, dislike of change, feeling loneliness, irritations and many more psychological phenomenon occurs with them. Ayurveda has its own way towards approach of Manas vyadhi also, which will be applicable in senile conditions.

Modern aspect of Aging and mind functioning:

Major change is loss of neurons leading to dementia resulting- loss of memory, deterioration of intellect, change in behaviour, change in personality, apathy mood instability, Alzheimer's disease leads to early onset of the features with fast progression, mind functioning deterioration is accompanied by proportionate bodily functioning deterioration.

Modern science proposed that our ageing starts as early as the individual just crosses forty years. The huge mental fluctuations like cognitive impairment, dementia, depressions, anxiety etc. are occur in this fragile age. There are many more risk factors which triggers the mental health like Alcohol or substance abuse Change of environment, like moving into assisted living, Dementia- causing illness (e.g. Alzheimer's disease), Illness or loss of a loved one specially the life partner or spouses, Long-term illness (e.g. cancer or heart disease), Medication interactions, Physical illnesses that can affect emotion, memory and thought, Poor diet or malnutrition, Feeling of avoidance or carelessness from the kiths and kins. It's natural for every one for some change to occur with the individuals with ageing. Regular forgetfulness is one thing, however persistent or cognitive memory loss is another thing and potentially serious. So there are some indicating or diagnosing features those propels one to concern seriously about the mental health of elderly like Changes in external appearance or dress, Problems maintaining home,

Confusion, disorientation, problems with concentration or decision-making, Increase or decrease in appetite than normal or changes in weight, Depressed mood lasting longer than 2/3 weeks or more ,Feelings of worthlessness, inappropriate guilt, helplessness, thoughts of suicide, Memory loss especially short-term memory loss(dyslexia), Physical problems that can not otherwise be explained like aches, constipations, Social withdrawal, loss of interest in things that used to be enjoyable, Trouble handling finances or working with numbers, Unexplained fatigue, energy loss or sleep changes.

The leading causes of mortality among elderly people comprise respiratory problems, heart diseases, cancer and stroke. Significant group of morbidity in these groups is degenerative changes, arthritis, Diabetes, Osteoporosis, Alzheimer"s disease, depression; Psychiatric disorders age related other problems etc.

Various Ausadhi can be used for the treatment are - Jatamanshi, Ashwagandha, Kapikachhu ,Tagara, Jivaniya mahakashya, Balya mahakshaya, Brumhaniya mahakashaya, Manduka parni, Yashti madhu, Guduchy, Sankhapushpi, Achara rasayana as described by Acharya Charaka.

Aushadhi yogas like - Chyavanprash, Bramhi Rasayana, Aswagandha Lehayam, Mahatriphala ghritam, Triphala churnam, Bramhi ghritam, Aswagandha churna, Narashimha Churna, Agastya Rasayana, Amlaki Rasayana, Vilwadi rasayana, Amarsundari vati etc. Can help to manage jara avastha.

Following Aharas like - Sukhoshna jala, Ghrita, dugdha, audana, Shashtika, Shali, Mudga, Saindhava, Amlaka, Yava, Jangala mamsa, Madhu will help to manage senility at ease.

Following Viharas like - Pranayam, Omkar chanting, also chanting of different mantras Ratrisayana, chankramana yatha shakti, Devalaya darshan, Tirtha sthan bhraman, Shree sukta path, Rudra pujan, vishunu pujan will help to manage old age.

Conclusion:

Older kiths and kin"s are integral parts of our society, it"s our duty to take care and stand by them in their hard times. What we are today is the gift of their hard work, dedication, love. To make their physical, mental and social life comfortable we should add maximum efforts. In old age there will be marked reduction of cellular metabolism, decreased immunity power, general weakness etc.

The Psycho-Neuro-Immuno-endocrine axis (P.N.I axis) of the human body will get altered. Ayurveda since a long already made solutions for this; we have just to apply it properly. The purification therapy prior to the administration of rejuvenating drugs will help to eliminate the waste forms of pitta and kapha to a marked extent. Rejuvenation therapy and rasayana drugs as mentioned in classical texts will help to manage the old age crisis.

MANOVAHA SROTOVIKARA IN GERIATRICS

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Abstract:

In today's world everyone consider the mind to domicile in the brain, in the head and all regards that the brains functions to control the mind and the intellect. But in Ayurveda, the mind is said to domicile in the heart, which makes sense. The heart is the centre of feeling; emotions, love and intellect Manovaha Srotsas are the pathway called channels of consciousness that flow by the mind. Srotsas are important in Ayurveda because they make up a system of channels that works for the body to do well. The diseases affecting to these srotasas termed as manovaha srotovikaras, diseases often present in old ages like Alzheimer's, Parkinsons, Dementia, Depression etc., are explained briefly in this article.

INTRODUCTION:

Geriatrics is a specialty that focuses on health care of elderly people. It aims to promote health by preventing and treating diseases and disabilities in older adults. In India 38% of the population are older than 65 years of the age. manovaha srotovikaras like Manoavasada (Depression), Kampavatha (Parkinsonism), Smritivibhransha (Alzheimer's), Smritibuddhihrasa (Dementia), affected to old age people has been explained briefly. Interest in the study and care of old aged people has greatly increased since it is the burning problem currently. At the present time, no treatment is available to alter the relentless deterioration of these disorders, building rapport with the patients family members and other care givers is very essential for successful management, but is found to be very difficult. In the ayurvedic system of medicine rasayana and panchakarma therapy are very useful in the management these disorders.

MATERIALS AND METHODS:

Alzheimer's disease (Smritivibhransha):

Alzheimer's disease is the form of dementia and usually occurs in the old age. In Alzheimer's disease, death of brain cells leads to memory loss. Modern science says A β (amyloid beta) is a causative agent of Alzheimer's disease and also some infections, toxins and metabolic disorders. The cholinergic deficiency in this disease is responsible for most of the short term memory which leads to progressive loss of memory, deterioration of all intellectual functions, increases apathy, decreases speech function, disorientation and gait irregularities.

Causes

1. Infections and Toxins:

AIDS-dementia complex (ADC) is probably the most significant one in this category. In toxins such as CNS depressants like benzodiazepines, conventional antipsychotics, and anticholinergics may lead to dementia.

2. Metabolic and Nutritional Diseases:

Vitamin B12 deficiency is associated with progressive psychosis and subtle cognitive impairment. Pellagra presents with dementia and dermatitis and is mostly seen in the malnourished and the alcoholics.

Investigations:

1. Blood Investigations -Haemogram and peripheral smear to look for anemia, vitamin B12 deficiency. LFTs to rule out acquired metabolic causes of dementia.
2. Neuroimaging A plain and contrast-enhanced CT scan of the head is sufficient in most cases to visualize tumors.
3. Cerebrospinal Fluid Examination CSF examination through a lumbar puncture is presently not mandatory but useful in detecting reversible causes of dementia such as chronic neuro infections.

DEMENTIA (Smritibuddhihrasa):

Dementia is loss of cognitive functioning- thinking, remembering and reasoning and behavioral abilities. Dementia manifests as a set of related symptoms, which usually surface when the brain is damaged by injury or disease. The symptoms involve progressive impairments to memory, thinking, and behavior, which negatively impact a person's ability to function and carry out everyday activities. Aside from memory impairment and a disruption in thought patterns, the most common symptoms include emotional problems, difficulties with language, and

decreased motivation. Dementia is not a disorder of consciousness, as that is usually affected. It ultimately has a significant effect on the individual, caregivers, and relationships in general.

Causes:

Dementia is caused by damage to or loss of nerve cells and their connections in the brain.

Depending upon the area of the brain that's affected.

1. Infections and immune disorders. Dementia like symptoms can result from fever or other side effects of your body's attempt to fight off an infection. Multiple sclerosis and other conditions caused by the body's immune system attacking nerve cells also can cause dementia.

2. Metabolic problems and endocrine abnormalities. People with thyroid problems, low blood sugar (hypoglycemia), too little or too much sodium or calcium, or problems absorbing vitamin B-12 can develop dementia-like symptoms or other personality changes.

3. Nutritional deficiencies. Not drinking enough liquids (dehydration); not getting enough thiamin (vitamin B-1), which is common in people with chronic alcoholism; and not getting enough vitamins B-6 and B-12 in your diet can cause dementia-like symptoms. Copper and vitamin E deficiencies also can cause dementia symptoms.

4. Medication side effects. Side effects of medications, a reaction to a medication or an interaction of several medications can cause dementia-like symptoms.

Investigations:

1. Cognitive testing

2. Laboratory tests: Routine blood tests are usually performed to rule out treatable causes. These include tests for vitamin B12, folic acid, thyroid-stimulating hormone (TSH), C-reactive protein, full blood count, electrolytes, calcium, renal function, and liver enzymes. Abnormalities may suggest vitamin deficiency, infection, or other problems that commonly cause confusion or disorientation in the elderly.

3. Imaging: A CT scan or MRI scan is commonly performed to possibly find either normal pressure hydrocephalus, a potentially reversible cause of dementia,

or connected tumor. The scans can also yield information relevant to other types of dementia, such as infarction (stroke) that would point at a vascular type of dementia. The functional neuroimaging modalities of SPECT and PET are more useful in assessing long-standing cognitive dysfunction, since they have shown similar ability to diagnose dementia as a clinical exam and cognitive testing.

The ability of SPECT to differentiate vascular dementia from Alzheimer's disease, appears superior to differentiation by clinical exam.

PARKINSON'S DISEASE (Kampavatha):

Parkinson's disease (PD), or simply Parkinson's, is a long-term degenerative disorder of the central nervous system that mainly affects the motor system. The symptoms usually emerge slowly, and as the disease worsens, non-motor symptoms become more common. The most obvious early symptoms are tremor, rigidity, slowness of movement, and difficulty with walking. Cognitive and behavioral problems may also occur with depression, anxiety, and apathy occurring in many people with PD. Parkinson's disease dementia becomes common in the advanced stages of the disease. Those with Parkinson's can also have problems with their sleep and sensory systems. The motor symptoms of the disease result from the death of cells in the substantia nigra, a region of the midbrain, leading to a dopamine deficit. The cause of this cell death is poorly understood, but involves the build-up of misfolded proteins into Lewy bodies in the neurons. Collectively, the main motor symptoms are also known as parkinsonism or a parkinsonian syndrome.

Causes:

The cause of PD is unknown, with both inherited and environmental factors being believed to play a role. Those with a family member affected by PD are at an increased risk of getting the disease, with certain genes known to be inheritable risk factors. Other risk factors are those who have been exposed to certain pesticides and who have prior head injuries. Coffee drinkers, tea drinkers, and smokers are at a reduced risk.

1. Environmental factors and exposures
2. Drug induced parkinsonism (ex-phenothiazines, metoclopramide).

3. Toxin induced parkinsonism (some toxins include manganese and carbon disulfide)
4. Genetics

Investigations:

A physician initially assesses for PD with a careful medical history and neurological examination. Focus is put on confirming motor symptoms (bradykinesia, rest tremor, etc.) and supporting tests with clinical diagnostic criteria being discussed below. The finding of Lewy bodies in the midbrain on autopsy is usually considered final proof that the person had PD. The clinical course of the illness over time may reveal it is not PD, requiring that the clinical presentation be periodically reviewed to confirm the accuracy of the diagnosis.

1. Imaging: Computed tomography (CT) scans of people with PD usually appear normal.

Magnetic resonance imaging has become more accurate in diagnosis of the disease over time, specifically through iron-sensitive T2* and susceptibility weighted imaging sequences at a magnetic field strength of at least 3T, both of which can demonstrate absence of the characteristic 'swallow tail' imaging pattern in the dorsolateral substantia nigra. In a metaanalysis, absence of this pattern was highly sensitive and specific for the disease.

2. The metabolic activity of dopamine transporters in the basal ganglia can be directly measured with positron emission tomography and single photon emission computed tomography scans, with the DaTSCAN being a common proprietary version of this study. It has shown high agreement with clinical diagnoses of PD. Reduced dopamine-related activity in the basal ganglia can help exclude drug-induced Parkinsonism.

DEPRESSION (Manoavasada):

Depression is a state of low mood and aversion to activity. Classified medically as a mental and behavioral disorder, the experience of depression affects a person's thoughts, behavior, motivation, feelings, and sense of wellbeing. The core symptom of depression is said to be anhedonia, which refers to loss of interest or a loss of feeling of pleasure in certain activities that usually bring joy to people. [5] Depressed mood is a symptom of some mood disorders such as major depressive disorder or dysthymia; (6) it is a normal temporary reaction to life events, such as

the loss of a loved one; and it is also a symptom of some physical diseases and a side effect of some drugs and medical treatments. It may feature sadness, difficulty in thinking and concentration and a significant increase or decrease in appetite and time spent sleeping.

People experiencing depression may have feelings of dejection, hopelessness and suicidal thoughts. It can either be short term or long term.

Causes:

1. Abuse. Physical, sexual, or emotional abuse can make you more vulnerable to depression later in life.
2. Age. People who are elderly are at higher risk of depression. That can be made worse by other factors, such as living alone and having a lack of social support.
3. Certain medications. Some drugs, such as isotretinoin (used to treat acne), the antiviral drug interferon-alpha, and corticosteroids, can increase your risk of depression.
4. Conflict. Depression in someone who has the biological vulnerability to it may result from personal conflicts or disputes with family members or friends.
5. Death or a loss. Sadness or grief after the death or loss of a loved one, though natural, can increase the risk of depression.
6. Gender: Women are about twice as likely as men to become depressed. No one's sure why. The hormonal changes that women go through at different times of their lives may play a role.
7. Genes: A family history of depression may increase the risk.

Investigations:

1. Physical examination: In some cases, depression may be linked to an underlying physical health problem.
2. Lab tests: complete blood count, thyroid test.
3. Psychiatric evaluation.

DISCUSSION:

Discussion about diseases affecting to manovaha srotovikaras like Manoavasada (Depression), Kampavatha (Parkinsonism), Smritivibhransha (Alzheimer's), Smritibud dhihrasa (Dementia), affected to old age people has been explained briefly. In Ayurveda manovikaras are characterised by vitiation of saririka and and manasika doshas, impairment of manokarma i.e., abnormal chintya vicharya uha and sankalpa, presence of alpa satwa, abnormal cheshta buddhi achara and bhakti etc., for the diagnosis of any disease, identifying the etiological factors plays an important role. By knowing the cause and signs and symptoms of the disease one can put differential diagnosis of the disease and can investigate accordingly to get better idea of the diagnosis and treatment. Almost all acharyas have stated that diagnosis is very important and essential before proceeding to medicine prescription. Hence this article is mainly focusing on causes and investigations of these disorders.

CONCLUSION:

The diseases affecting to manovaha srotas seems to be a Yapyavyadhi (palliative condition) as per Ayurvedic understanding of its pathogenesis. Early detection of the problem and early starting of the treatment is required to prevent the progress of the disease. Ayurvedic approach to management with Medhyarasayana and Panchkarma therapy is useful in the treatment of dementia and effective in improving not only the quality-of-life of the patient, but also the care givers/family members in broader sense.

CONCEPT OF MANOVAHA SROTOVIKARA IN GERIATRICS

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ABSTRACT:

The definition of Ayurveda itself denotes that it is the knowledge of various aspects of life processes, ageing being one of them. O ld age is characterized by deficit in the physical and psychological functioning. In old age there is degeneration of bodily organs. just as physical doshas vitiate body, similarly doshas pertaining to manas like rajas and tamas vitiate the mind and such vitiation produces manovikara. Because of isolation and psychological dependency old age people are more prone for depression mania, loss of memory particularly of Alzheimer"s type, dementia, delirium etc. due to various factors affecting their mind.[1] one should know psychological problems in geriatrics to remove the cause of concern. Here an effort has been to compile all scattered matter about the concept of manovahasroto vikara in geriatrics.

KEYWORDS: Manovahasrotovikara, G eriatrics, manas

INTRODUCTION:

„Life“ in Ayurveda is „Ayu“ which is defined as jeevitakala or lifespan. It is derived from the root w ord “ungamanasheela” indicating its nature of moving on. According to Acharya C haraka age has been divided into three parts Balyavastha (young age), M adhyamavastha (middle age) and jeernavastha (old age).[2] after 60 years of age one is called old. Acharya S ushruta has described that after 70 years of age one is called old. he has mentioned jara (ageing) under S w

abhavabalapravrittavyadhi which is of two types kalaja or parirakshanakrita and akalaja or aparirakshanakrita[3] . Three major problems are encountered by the aged population like health problems, financial problems, social and psychological problems. Senescence is the normal process of growing old while the senility refers to the abnormal state which sometimes supervene towards the close of old life. The study of the physical and psychological changes which are incident to old age is known as gerontology while geriatrics is the study of the cause and medical treatment of ill-health associated with old age. In old age there is progressive diminution of dhatu, strength of indriya, power of understanding, retaining and memorizing, speech and analyzing facts. Depression, bipolar affective disorder, dysthymia, anxiety disorders, delusional disorders, delirium, dementia, intoxication or withdrawal syndromes, mood disorders are psychological disorders observed in old age. Ersha, shoka, bhaya, manodwesa, harsha, vishada, abhyasuya, matsarya, kama, lobha, iccha, dwesa are manovikara in old age mentioned by Acharya Charaka. It is estimated that about 50% - 60% of elderly have psychiatric disorders. The exact prevalence of these disorders in India is not known but depression is believed to be the commonest disorder. The prevalence rate of mental disorders in the aged is around 89/1000 population. nearly 4 million are mentally ill in India. The overall prevalence rate of psychiatric morbidity rises from 71.5% for those between the age of 60 and 70, to 124 in those in their 70s, and 155 in those over the age of 80 years.[4]

MANOVAHASRO TO VIKARA IN GERIATRICS

Diseases caused due to impairment of manodosha i.e rajas and tamas are kevala manovikaras, few diseases are caused due to impairment of both manodosha and sharirika doshas, although they present themselves clinically as physical illness they are relieved only when causative factors, emotional disturbances are relieved these conditions are compared to psychosomatic illness, the other variety includes mental disorders that are caused due to the primary impairment of sharirika doshas and subsequent involvement of manodoshas which can be called ubhayatmaka vikaras.[5]

| | | |
|------------------|---|---|
| Kevalamanovikara | Psychosomatic disorders (Manas is involved in the beginning later sharira is involved) | Ubhayatmakavikara (Sharira is involved in the beginning later manas is involved) |
|------------------|---|---|

| | | |
|-------------|--------------------------|------------------|
| Kama | Shokaja jwara | U nmada |
| Lobha | Krodhaja jwara | Atatvabhinivesha |
| Maana | Shokaja atisara | Mada |
| Shoka | Dvishtarthayogaja chardi | Sanyasa |
| Chinta | Manasikaarochaka | Vishajaunmada |
| Harsha | Kamaja jwara | Tandra |
| Abhyasurya | Bhayaja atisara | Apasmara |
| Krodha | Shokaja shosha | Apatantraka |
| Irsha | | Murcha |
| Mada | | Madatyaya |
| Chittodvega | | Nidradhikya |
| Bhaya | | |
| Vishada | | |

C O M M O N L Y S E E N M A N O V A H A S R O T O V I K A R A I N G E R I A T R I C S

- Vishada (depression): grief is the normal response of an individual to the loss of loved object or person, loss of reputation or self- esteem, vishada is result of fear of failure.
- Chittodvega (anxiety neurosis): a generalized anxiety disorder is present if a subject experiences unrealistic worry about two or more life circumstances for a period of six months or more along with at least six symptoms of anxiety.
- Samvibhrama (persistent delusional disorder): the delusions such as delusion of persecution, delusion of love and other absence of significant or persistent hallucinations, absence of organic mental disorders schizophrenia and mood disorders.

- d) Krodha: it is a feature of rajoguna and is produced either due to aggravation of vata or pitta dosha. Anger is produced when one could not acquire the desired one and sammoha follows it.
- e) Gadodvega (Hypochondriasis): persistent preoccupation with a fear or belief of having one or more serious diseases based on person's own interpretation of normal body function or a minor physical abnormality. On examination these people do not possess any disease or significant abnormality.
- f) Manogranthi (obsessive compulsive disorder): the term obsession refers to a persistent recurrent idea, thought, feeling or impulse. A compulsion is characterized by the presence of obsession that leads to compulsion that the patient recognizes as morbid and often in vain.
- g) Bhaya (fear): it is related to tamoguna and aggravates vata guna, this bhaya forms important causative factor for many psychoses.
- h) Smritinasha (Dementia): it is a chronic mental disorder characterized by impairment of intellectual functions, memory, deterioration of personality with lack of personal care and interpersonal relationship, impairment of judgement and impulse control and abstract thinking.

NIDANA FORMAN O VAHAS RO TO VIKARA IN GERIATRICS

- a) Asatmyendriyarthasamyoga (non homologate contact of senses), Pragnyaparadha (volitional transgression) and Parinama (changes in season) have been considered under three types of general etiological factors for the disease production. The same nidana holds good for manovikara in geriatrics as well. [6]
- b) In old age there will be atiyoga, ayoga in relation to indriya, artha, karma and kala, karma comprises activity of speech, mind and body with reference to manas giving way to fear, grief, anger, greed, infatuation, envy etc. [7]
- c) In old age there is presence of emotional disturbances like krodha, shoka, bhaya, harsha, lobha etc. which are different kinds of manovikara. [8]
- d) Accrual of undesired objects and not getting desired ones is also cause for manovikara in geriatrics.
- e) Various functions of satwa (mana) like manoniyamana, manoprerana, harsha, utsaha, prayatna, buddhi, medha, abhimana etc. are also affected in old age due to decreased satwabalas which adds up different kinds of manovikaras.

f) In Ashtanga Hridaya the very chapter discussing vegadharana is named as Roganutpadaniya adhyaya signifying the importance of vegadharana as a vyadhihetu especially in causing vata vyadhi and also manovikara which is concern during old age.[9]

g) Ahita ahara causing manovikara in geriatrics are anashana (ayuhrasahara), ruksha satmya and ekasatmya ahara (alpaayushi), pippalatisavana (tridoshaprakopa), kshara atisevana (kesha, akshi, pumsatvaghata), atilavana sevana (akala khalitya palitya vali), navashalidhanya sevana (abhishyandi). [10]

h) Paradarabhigamana (anayushya), atimaithuna (kshayajanya roga), rathakshobha (sarvadehavyadhi), diw asw apna (shleshmaja vikara), atichankramana (adhodehavikaras), uchairbhashana (urdhw adehavikaras), atyasana (madhyadehavikaras), hinamithyayoga of indriya (aindriyikavyadhi), maithuna in bala and vriddha (ayuhrasa), ativyayama (kasa, jw ara, chardi), atijagarana, adw a, hasya, bhashya (marana), ushnambusechana on shira (kesha , chakshudourbalya), vishamangacheshta, arkalokana, bharavahana ,exposure to purovata, atapa, rajatushara and parusha anila (tridoshakopa).[11]

i) According to acharya Vagbhata There is sequential loss of mana at the age of 81- 90 years and according to acharya S harangadhara there is sequential loss of mana and buddhi at the age of 81- 90.

j) The problems associated with ageing may also lead to high ranking stressors of ageing including acute and chronic medical illness, concomitant use of therapeutic drugs, medical illness connotes physical loss and changes in body image, but the loss of job carries with it loss of financial resources, social status and most of social network, the loss of contemporize through death, illness and migration brings psychological deprivation of an intimate object, in addition to losing most of their worldly possession and social support they also lose their privacy and their sense of self-worth.[12]

k) In old age there is oja kshaya which leads to manobalaheenata causing manovahasrotodushtivikara .[13]

SAMPR APTI O F MANOVAHASRO TO VIKARA IN GERIATRICS

in old age there is Increase in vata dosha (rajabahulya), vitiation of pitta dosha, diminution of kapha dosha.

Vishamagni, dhatw agnimandya and formation of ama.

R asa dhatu is not formed properly, function of preenana to rest of the dhatus is not performed.

R esulting in sequential w eakening of all dhatus (dhatukshaya).

S haririka and manasika vyadhikshamatw a or oja kshaya vyathitendriya (impaired sense organs and motor organs) manobalahinata (decreased mental ability) and loss of manoniyamana vitiation of raja tama doshas in manas causing manovahasrotovikara.

AYURVED ICAPPROACH OF PREVENTIVE CARE IN GER IATR IC S

- a) Hitacharya and ratricharya palana
- b) R itucharya palana
- c) S w asthvritta palana
- d) Achara rasayana
- e) S advritta palana
- f) Initiation of rasayana therapy in parihaniavastha i: e earlier than 40 plus age for ayubala Pushtiand sw astyata

C O N C L U S I O N

Ageing is grow ing, it occupies the total lifespan and does not occur as merely the final stage of life. In this sense w e study the aged to learn not only about the final phase of life but learn about the physiological progress and psychological changes in body as a w hole. The w orld health organization (W HO) very appropriately declared the calendar year 1999 as the year of elderly people, the senior citizens, to focus on the grow ing problems of ageing people. In the context of jarajanyavikaras, vata dosha is predominant leading to increase in rajoguna as w ell as there is depletion in ojas and satw a of the vriddha submerging him in different manovikara . A pair of shoes w hich have softened and crossed over time, function reasonably w ell how ever there is infinitesimally small margin before a creese become a crack and lets w ater in (an analogy for physiology and

pathology). The chief aim of geriatrics is to “Add life to years” rather than “ years to life”, if preventive care is taken properly, it is possible to achieve this goal and avoid manovahasrotovikara in geriatrics as much as possible. The tremendous potential in Ayurveda may be tapped for the benefit of the geriatric patient” s day to day problems on a long - term basis, there by offering greater and more viable “scope” for “geriatri4444cs in Ayurveda” in the future, let noble thoughts flow from every direction.

REFERENCES:

- 1) M anas psychiatry of Ayurveda by D r. Pedaprolu S rinivasa R ao, Banaras Ayurveda series 35, C how khamba S anskrit series office Varanasi.Pg.145.
- 2) C haraka S amhita , Vimana sthana vol.2 text w ith English translation and critical exposition based on chakrapanidatta” sAyurveda dipika , by R .K. S harma bhagw an dash, chow khamba S anskrit series office Varanasi, pg.277.
- 3) S ushruta S amhita, sutrasthana vol.1 text w ith English translation, notes, appendeces and index by Prof. K.R. S rikanth M urthy, C haukhambha O rientalia Varanasi, Pg.8.
- 4) G eriatric care, a textbook of geriatrics and gerontology, third edition edited by O .P. S harma, Viva books New D elhi/M umbai/C hennai/Kolkata/Bangalore/Hyderabad/Kochi.Pg.450.
- 5) M anas psychiatry of Ayurveda by D r. Pedaprolu S rinivasa R ao, Banaras Ayurveda series 35, C how khamba S anskrit series office Varanasi.Pg.29.
- 6) C haraka S amhita , S harira sthana vol.2 text w ith English translation and critical exposition based on chakrapanidatta” sAyurveda dipika , by R .K. S harma bhagw an dash, chow khamba S anskrit series office Varanasi, pg.186.
- 7) C haraka S amhita , S utrasthana vol.1text w ith English translation and critical exposition based on chakrapanidatta” sAyurveda dipika , by R .K. S harma bhagw an dash, chow khamba S anskrit series office Varanasi, pg.39.
- 8) S ushruta S amhita, sutrasthana vol.1 text w ith English translation, notes, appendeces and index by Prof.K.R . S rikanth M urthy, C haukhambha O rientalia Varanasi, pg.8.

- 9) Ashtanga Hridayam , sutrasthana vol.1 text w ith English translation, notes, Appendix indices by Prof.K.R . S rikanth M urthy, C how khamba Krishnadas academy Varanasi, pg.45.
- 10) G eriatrics in Ayurveda by D r. S uresh Babu, C houkhambha O rientalia Varanasi Pg.63.
- 11) G eriatrics in Ayurveda by D r. S uresh Babu, C houkhambha O rientalia Varanasi Pg.64.
- 12) G eriatric care, a textbook of geriatrics and gerontology, third edition edited by O .P. S harma, Viva books New D elhi/M umbai/C hennai/ Kolkata/ Bangalore / Hyderabad/Kochi.Pg.50.
- 13) Vyadhikshamatva ekadhyaya by D r.B.K. D vivedi, C how khamba Krishnadas Academy Varanasi Pg.13.

CONCEPT OF NIDANAPANCHAKA IN JARAJANYAVYADHI

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ABSTRACT:

Ayurveda has a holistic approach towards all the miseries of human. Ayurveda considers jaravastha as a swabhavika¹ and yapya vyadhi. Hence Jara chikitsa is one of the important branches among Asthanga of Ayurveda. Aging is a multidimensional process of physical, physiological and social changes. These changes are always degenerative in nature. Even doshas, dhatus, mala, agni and ojas etc... also start diminishing. Ageing is considered as Vardhakyavastha in Ayurveda. Ageing is defined under the name of Jaravastha, Jara, Vardhakya etc. In Ayurveda, acharya Charaka says, destruction takes place in Shareera continuously which leads to ageing or Jaravastha. In aged, vata dosha is physiologically in a dominant state and rasadi dhatusara in a deficient state. This potent combination is responsible for the various degenerative changes and process of decay in the body.

KEY WORDS: swabhavika vyadhi, yapya vyadhi, Degeneration.

INTRODUCTION:

According to Ayurveda the life span of an individual is divided into three parts known as Vaya. These are Balavastha (childhood), which lasts up to the age of 16 years; Madhyavastha (young and middle age), which lasts from the age of 16 years to 60–70 years; and Vriddhavastha or Jirnavastha (old age), which refers to the period after 60 or 70 years. Thus, every person will pass through a period when various decaying changes will take place, and this time period is known as Vriddhavastha. This stage is characterized by decay in the body, Dhatu (various anatomical tissues), perception power of the Indriya (sensory and motor organs), potency, strength, speech, various mental and cognitive functions (e.g., memory, intellect, reception, retention, analytic ability, etc.). During this phase there is predominance of Vaayu Dosha (one of the three physiological body factors). Vriddhavastha may be of two types³ : Kalaja (if it manifests after the age of 60 – 70 years) and Akalaja. Akalaja jara may result due to aggravation of vata and pitta dosha. Therefore, excessive utilization of all the causes of vata–pitta aggravation may lead to akalaja jara.

JARA NIDANA:

1. Swabhavoparamavada 4:

According to acharya charaka , there is a hetu for utpatti but there is no such hetu exists for their destruction. . Thus swabhava can be considered as responsible for causing jara.

2. Kala⁵:

“Kalasyaparinamena jaramrityunimittjah”

In Ayurveda, the sequence of change is known as parinama, which takes place under the influence of kala. Thus it is considered as parinama brings jaravastha etc...Jara is stage of life that occurs by the effect of kala.

3. Aharatmaka nidana 6 :

- Ati sheeta sevana
- Kadanna nishevana
- Amla, Katu, Lavana rasa, Kshara, Guru, Ruksha, Klinna (softened), Abhishyandi (those which obstruct the channels of circulation) accelerates the process of ageing.

- Navashukadhanya (newly harvested class of corns), Navashamidhanya (newly harvested class of pulses), Shuskamamsa (dried meat), Tila (sesamum), etc. produces Ama by decreasing Agni and leads to ageing process.
- Different type of viruddhaahara (incompatible diet) i.e. Rasa viruddha, Guna viruddha, Virya viruddha etc. are also responsible for initiation of ageing process.
- Asatmya ahara (unwholesome diet), Vishamashana, Adhyasana etc. leads to Agnidushti and senility.

5. Viharatmaka nidana:

- Ati pada gamana
- Continuous maithuna karma with elderly
- Divaswapna (day sleep), Ativyavaya (excessive indulgence in sexual act), and Vishama- atimatra vyayama etc. are the Viharatmaka hetus of Jara.

6. Manasika nidana:

- Bhaya, Krodha, Shoka, Lobha, Moha etc. are the causes for the senility.

7. External factors 7:

- Ayu is dependent on karmas
- If daiva and purushartha samyoga is in uttama yoga then deerghayu will be attained.
- If the yoga is heena then dukhapurvaka alpayu will be attained
- If the yoga is madhyama then sukha and dukhapurvaka madhyamayu is attained.

SAMPRAPTI OF JARA :

1. The samprapti of kaalaja jara is as follows:

There is increase of Vata in old age which causes improper nourishment of Rasa Dhatu and all the Dhatus also undergo improper nourishment. This gradual malnourishment leads to irreversible process of Kaalaj Jara (aging).

2. The Samprapti of Akaalaj Jara (etiology of premature aging) is as follows:

Nidanas (causative factors) such as Ati AharaVihara (excess food intake and improper lifestyle), Manasika Vega Adhaarana (non-suppression of unpleasant

emotions) leading Srotolepa (blocks the body channels) which in turn causes Agnimandya and then forms Ama. When the function of Agni is vitiated, there is improper nourishment of Rasa and successive Dhatus causing Shareera Apachaya (improper nourishment of body) and Oja Hrasa (depletion of the Ojas) resulting in Akaalaj Jara (premature aging).

Nidana sevana

Vata vriddhi

Agnimandya,

Dhatwagnimandya Ama

utpatti sroto avarodha No

formation of adhyadhatu

No dhatu poshana

Dhatukshaya

Oja kshaya

PURVARUPA 8:

Jarajanya Vyadhi

According to Acharya Madhavakar , Jara purvarupa is explained as

- Shareera Shakti ksheenata (diminishing energy and strength)
- Smriti nasha (loss of memory)
- Glani in shareera (lethargy)
- Vali utpatti (wrinkles in skin)
- Palitya (greying of hair)
- Danta shithilata (loosening of teeth)
- Swabhava viparyasa (different changes in the behavior of a person)

RUPA:

| Signs and Symptoms | Charaka ⁹ | Sushruta ¹⁰ | Ashtanga sangraha ¹¹ | Ashtana hridaya ¹² | Madhav Nidana ¹³ |
|---------------------------------|----------------------|------------------------|------------------------------------|----------------------------------|--------------------------------|
| Dhatu kshaya | + | + | + | + | - |
| Indriya kshaya | + | + | + | + | - |
| Bala kshaya | + | + | + | - | + |
| Virya kshaya | + | + | + | - | - |
| Utsaha kshaya | - | + | + | - | - |
| Ojohani | - | - | - | + | |
| Vali | - | + | + | + | - |
| Phalita | - | + | + | + | - |
| Khalitya | - | + | + | + | - |
| Paurusha hani | + | - | - | - | - |
| Parakrama hani | + | - | - | - | |
| Grahana,dharana, smaranahani | + | - | - | - | + |
| Vigyana hani | + | - | - | - | - |
| Dhatu guna kshaya | + | - | - | + | - |
| Alparetas | + | - | - | - | - |
| Agnisada | - | - | + | - | + |
| Kasa | - | + | - | + | + |
| Shwasa | - | + | + | - | + |
| Vaipathu | - | - | + | - | + |
| Shlatasara | - | - | + | - | - |
| Shlatamamsa | - | - | + | - | - |
| Prabhahani | - | - | + | - | - |
| Medahani | - | - | + | - | + |
| Twakparushya | - | - | + | - | - |
| Dhairya pranasha | - | - | - | - | + |
| Yuvajanachitkritya | - | - | - | - | + |
| Chinta | - | - | - | - | + |
| Ghrina adhikta | - | - | - | - | + |
| Ghrina adhikta | - | - | - | - | + |
| Krishata | - | - | - | - | + |
| Krodha bahulyata | - | - | - | - | + |
| Kapha vriddhicha gale | - | - | - | - | + |
| Hasta pada kampa, | - | - | - | - | + |
| Vepathu | - | - | - | - | + |
| Murdha skalana | - | - | - | - | + |
| Pada dvaya skalana | - | - | - | - | + |
| Dhanurvata | - | - | - | - | + |
| Dehasyachtinamanam | - | - | - | - | + |

| | | | | | |
|----------------------|---|---|---|---|---|
| Buddhi balyam jayeta | - | - | - | - | + |
| Prakriti atikarata | - | - | - | - | + |
| Vatamaya | - | - | - | - | + |
| Swalpa Shakti | - | - | - | - | + |
| Dandashayena | - | - | - | - | + |
| Rad hinta ashaye | - | - | - | - | + |
| Ativismati | - | - | - | - | + |

UPASHAYANUPASHAYA 14:

- Just as how the amrita was important for Devas and sudha for Naagas , in the same manner , Rasayana chikitsa was most important for Rishis in ancient period.
- In the ancient era, Rishis used to get mukti from Jara, durbalata, vyadhis and death with the use of this Rasayana vidhis and used to live their healthy life for over 1000 years.
- Rasayanas doesn't alone profits with Deerghayu, it also enhances Gati like Deva rishis.

Such rishis become Akshaya Brahma and attain Moksha.

SADHYA ASADHYATA 15:

In Jaravastha, to get relief from sukhasadhya and krichra sadhya vyadhis , one has to follow rasayana chikitsa and give up all the rogotpadaka hetus .

CONCLUSION:

- Aging is the process that reduces the number of healthy cells in body, therefore body loses its ability to respond to a challenge to maintain homeostasis.
- Ayurveda has addressed geriatric health issues under heading "JARA".
- Ayurveda being the science of life and longevity offers a treasure of geriatric care. It deliberates the science and philosophy of life, longevity with goal of healthy aging and long life.
- It considers aging as swabhava of life and describes the pattern of sequential losses of biological strength with advancing age in relation to tridosha.

REFERENCES:

1. Sushruta samhita Nibandha sangraha Tika by dalhanacharyakrita by Dr kevala Krishna thakarala vol.1 , chaukambha orientalia publications Varanasi 2014, Sutra sthana Vedotpatti adhyaya 1 /25, page 16
2. Acharya JT. Sushruta Samhita with Nibandhasangraha commentary of Dalhana. Sutrasthana 35/29, Reprint edition. Chaukhambha Sanskrit Sansthan, Varanasi (India): 2009. P 155
3. Sushruta samhita Nibandha sangraha Tika by dalhanacharyakrita by Dr kevala Krishna thakarala vol.1, chaukambha orientalia publications Varanasi 2014, Sutra sthana vyadhi samuddheshiya adhyaya 24/ 7 page 281
4. Charaka samhita vidyotini hindi teeka vol.1 choukamba bharati academy, Varanasi publications sutrastana 16/28- page no. 325
5. Charaka samhita vidyotini hindi teeka vol.1 choukamba bharati academy, Varanasi publications Shareera stana 1/115- page no. 826
6. Madhava nidana madhukosha tika by Ayurveda acharya shree Yadunandanopadhyaya part
7. 2, Choukambha prakashan, Varanasi, Jara roga nidanam parishishta roga 1, page no-595
8. Charaka samhita vidyotini hindi teeka vol.1 choukamba bharati academy, Varanasi publications Vimana stana 3/32-34 – Page no. 699
9. Madhava nidana madhukosha tika by Ayurveda acharya shree Yadunandanopadhyaya part 2, Choukambha prakashan, Varanasi, Jara roga nidanam parishishta roga 2,3, page no-595
10. Shastri K N & Chaturvedi G N, Charak samhita of Acharya Agnivesh with vidyotini Hindi commentary, (Chaukhambha Bharati Academy, Varanasi), 1984, Ch.vi. 8/122
11. Shastri A D, Sushruta samhita of Maharshi Sushruta with Ayurvedatatwasandipika Hindi commentary, (Chaukhambha sSanskrit Sansthan, Varanasi), 1953-1959, Su.su. 35/36.
12. Athavola A D, Astanga sangraha of Vriddha Vagbhatta,(Srimod Atreya Prakasanam, Nandanadam, Pune), 1980,As.sa.su. 8/24.
13. Gupta A, Astanga hridaya of Vagbhatta with vidyotini Hindi commentary, (Chaukhambha Sanskrit Sansthan, Varanasi), 1982, As.hr.su. 8/105
14. Madhava nidana madhukosha tika by Ayurveda acharya shree Yadunandanopadhyaya part 2, Choukambha prakashan, Varanasi, Jara roga nidanam parishishta roga 4-9, page no-595

15. 14. Charaka samhita, shree Chakrapanidatta virachita Ayurveda dipika by vaidhya Harishchandra simha kushavaha vol.2, chaukambha orientalia Varanasi 2009 chikitsa sthana Rasayana chikitsa adhyaya 1/ 78-80 page 93
16. Madhava nidana madhukosha tika by Ayurveda acharya shree Yadunandanopadhyaya part 2, Choukambha prakashan, Varanasi, Jara roga nidanam parishishta roga 10, page no-596

CLINICAL EXAMINATION IN GERIATRIC DISORDERES: SKIN EXAMINATION IN GERIATRIC (XEROSIS IN ELDERELY)

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ABSTRACT:

Geriatrics is the branch of medicine concerned with the care and treatment of elderly. Aging is a natural process; the body is decaying incessantly, as shown by its etymology that is “Shreeryate eti shariram”. Xerosis is a common dermatological skin condition characterized by dry, pruritic, cracked, and fissured skin with scaling. Xerosis is highly prevalent in the elderly population and has an immensely negative impact on the quality of life of affected individual. Jaravastha (Old age) is represented by predominance of Vata dosha which leads to dryness of skin. Xerosis is due to vitiation of Vata dosha. Ayurveda has a holistic approach towards all the miseries of man and aging is one of these. Management of skin diseases has always been a strong hold of Ayurveda. A diagnosed case of xerosis is presented here which was intervened successfully with Ayurvedic formulation. Purpose of review the goal of this paper is to outline a treatment approach to xerosis in the elderly population.

KEYWORDS: Geriatrics, Xerosis, Elderly, Aging, Dryness, Jaravastha, Panchatikta ghrita, Vata dosha

INTRODUCTION:

Geriatrics is the branch of medicine dealing with problems of aging and diseases of elderly. In Ayurveda, every condition (whether transient or persistent) that leads to a disturbance of homeostasis is termed as disease. [1-3] Thus, vridhahavastha (Old age) has been considered as a disease. According to Ayurveda the lifespan of an individual is divided into three parts known as Vaya (Age). These are Balavastha

(Childhood) which last up to the age of 10 years; Madhyavastha (Young and middle age), which last from the age 16 years to 60-70 years; and Vriddhavastha or Jirnavastha (Old age) which refers to the period after 60 or 70 years. [4-6] Xerosis is one of the most common skin manifestations for day-to-day consultation in the elderly. Prevalence of xerosis ranges from 5.4% to 85.5%.[7] Geriatric population is an increasing chunk of Indian population and has become a worldwide concern. Thereby effective health care should be provided to these patients in terms of health services.

Aging is as biological reality in which there is progressive functional decline due to the accumulation of molecular changes over the time. Human skin like all other organs, undergoes chronological aging and is susceptible to skin disorders due to structural and physiological changes in response to intrinsic and extrinsic aging.[8] Thus, the ambit of dermatological care needed for the elderly population. Xerosis is common dermatological skin manifestation characterized by dry, pruritic, cracked, and fissured skin with scaling. Xerosis affects the elderly primarily because they have decreased sebaceous and sweat gland activity which predisposes their skin to lack of moisturizing factors and/or impairment in the natural barrier function leading to decreased skin hydration.

Xerosis is due to vitiation of Vata dosha. Dryness is one of the qualities of Vata dosha which is responsible for depletion of tissues. Vitiation of Vata leads to the manifestation of excessive dryness and roughness in the body. Excessive dryness will totally deplete the unctuousness of the tissue and make the body dry and vulnerable to many diseases.

Diseases pacifying treatment should be planned according to Doshas affected; mostly the geriatrics disorders have thrived during old age which is the best period of vitiation of Vata dosha.

Basic skin care products for the treatment of xerosis include topical dermo cosmetic agents, provide temporary symptomatic relief but reoccurrence of disease is common.

Hence in the present study an attempt has been planned to explore the utility of Panchatikta Ghrita in cases of xerosis.

MATERIAL AND METHODS

Case report presenting concern

This is case report of 70 years old male patient diagnosed with xerosis in the outpatient department (OPD) of YMT Ayurvedic Medical College, Kharghar, India (OPD Registration No.

198503/2021), with complaints of dry, itchy and scaly skin of the arms, red irritated skin of the arms and fine cracks on the skin of arms. These symptoms started occurring over a period of 6 months. He had no history of DM/HTN/Asthma or any major illness.

Clinical finding general examination

The general condition of the patient was good and without alternations in vital signs. He had occasionally constipated bowl and irregular sleep pattern. His Prakriti (physical constitution) was Vata-Kapha predominant. Agni (Metabolic factor) status was Manda (mildness/slowness) and Koshta (Nature of bowel) status was Krur (Irregular nature of bowel).

Case conception and selection of Ayurvedic treatment

Patient was on topical dermo cosmetic agents for 6 months but there was no significant relief hence patient approached Ayurvedic hospital and as he had faith in Ayurvedic medicine he has chosen Ayurvedic intervention for his condition. Patient was administrated Panchtikta Ghrita for the period of one month. Panchtikta Ghrita was given orally in a fixed dose of 12ml twice daily before food with lukewarm water as a Anupana (Co-administers with medicine) also Panchatikta Ghrita was given for external application over the affected areas twice daily.

Result

Changes in ODS (Overall Dry Skin Scale), SRRC (Specified symptoms sum score) score and photograph were included as the outcome measure before and after treatment. A significant improvement was observed in the all assessed parameters. No adverse effect was reported pertaining to the prescribed drug.

The clinical scoring system of EEMCO (The European Group for Efficacy Measurements in Cosmetics and other Topical Products) guidance adopted by

Masson et al., 1995 to evaluate the visual signs of dry skin, it covers the following items:[9]

1. Overall dry skin score (ODS)

The Overall Dry Skin score is a clinical assessment of the presence and severity of skin dryness using a five-point scale. A score of „0“ indicates no skin dryness, whereas a score of „4“ indicates advanced skin roughness, large scales, inflammation and cracks.

2. Specified symptoms sum score (SRRC) system with grading of scaling, roughness, redness and cracks described the following table.

Table 1: Four signs of SSRC

| | Scaling | Roughness | Redness | Cracks Fissures |
|-----------------|--|--|--|--|
| 0 = Absent | Absent | Perfectly smooth and pliable | Absent | Absent |
| 1 = Slight | Small scales only, surface lightly dull in color | Slightly irregular and scratchy on tangential tactile evaluation | Small areas of minimal redness or diffuse faint redness | Single and superficial cracks in the examination filed |
| 2 = Moderate | Small scales in combination with larger scales (>0.05 mm), surface opaque or whitish | Definitely irregular and scratchy and possibly slightly stiffened on vertical tactile evaluation | Limited areas of definite redness or diffuse and obvious | Single or grouped superficial and more deep cracks |
| 3 = Severe | Larger and large scales (flake >1 mm) are prominent, surface whitish | Advanced irregularly and scratchy feeling associated with some stiffening | Large areas of definite redness or diffuse and more pronounced | As 2 but with deep cracks |

| | | | | |
|----------------|--|--|---|--------------------------|
| 4 = Extreme | Larger flakes covering almost the entire skin surface in the examination field | Gross irregularity and major disturbance of skin marking and definite stiffening | Advanced redness in entire examination field (redness of cracks not included) | Dominated by deep cracks |
|----------------|--|--|---|--------------------------|

Table 2: Subjective Assessment:

| Subjective Assessment | | |
|-----------------------|------------------|-----------------|
| Score | Before treatment | After treatment |
| 1. ODS | 4 | 0 |
| 2. SRRC | | |
| • Scaling | 3 | 1 |
| • Roughness | 3 | 0 |
| • Redness | 2 | 0 |
| • Crack fissures | 1 | 0 |

Table 3: Objective Assessment:

| | Before treatment | After treatment |
|------------|---|---|
| | Picture 1 (Right Arm) | Picture 2 (Right Arm) |
| Photograph |  |  |

DISCUSSION:

Xerosis in the elderly arises in part due to age dependent physiologic changes in the ability of skin to produce and retain moisture. Xerosis is generally diagnosed on clinical grounds. Possible trigger factors must be avoided and/or underlying diseases must be determined and specifically treated. In the elderly aggravation of Vata Dosha leads to dryness of skin. Dry skin is often accompanied by pruritis. Pruritis induced scratching leads to excoriations. Management of skin diseases has always been a stronghold of Ayurveda.

The Ingredients of Panchatikta Ghrita [10] include Nimba (*Azadirachta indica*), Patola (*Trichosanthes curcumerina*), Vyaghri (*Solonum virginanum*), Guduchi (*Tinospora codifolia*), Vasa (*Adhatoda Vasica*), Haritaki (*Terminalia chebula*), Vibhitaki (*Terminalia bellerica*), Amalaki (*Phyllanthus embilica*), and Goghrita (Ghee prepared from cow's milk); most of which have antipruritic and skin soothing property.

In this case trial Panchatikta ghrita is opted for internal and external administration owing to the unique property of its ingredients to soothe the dry and itchy skin.

Hemadri states that Shamana Snehana normalizes the aggravated Dosha without expelling and disturbing the normal Dosha [11]. Shamana Snehana is a procedure of administration of Madhyama Matra of Accha Snehana during Annakala when one feels hungry without taking the meal [12,13]. All the ingredients of the Ghrita have the inherent ability to alleviate Vata Dosha.

The intervention used in the trial are expected to alleviate the symptoms, prevent reoccurrence and restore the normal Doshik and Panchabhautik balance of the skin.

CONCLUSION:

In view of above it can be concluded that present study provided scientific evidence for utilizing potential of Panchatikta Ghrita to enhance the clinical outcome in xerosis.

REFERENCE:

1. Sastri A, editor. Sutrastahan. Varanasi: Chaukhamba Sanskrit Samsthana; 2001. Susruta, Susruta Samhita, Ayurvedatatvasandipika; p. 64.

2. Panasikar V.L, editor. Varanasi: Chaukhamba Sanskrit Pratishthan; 1995. Amar Singh, Amarkosha Raamaashrami; p. 388.
3. Sastri K, Chaturvedi G, editors. Sarirasthan. Varanasi: Chaukhamba Bharti Academy; 1998. Agnivesha, Charak Samhita, Vidyotini; p. 192.
4. Sastri K, Chaturvedi G, editors. Vimansthan. Varanasi: Chaukhamba Bharti Academy; 1998. Agnivesha, Charak Samhita, Vidyotini; p. 782.
5. Sastri K, editor. Sutrastahan. Varanasi: Chaukhamba Sanskrit Samsthana; 2001. Susruta, Susruta Samhita, Ayurvedatatvasandipika; p. 135.
6. Sastri K, Tripathi I, Tripathi S, editors. Sharirsthan. Varanasi: Krishnadas Academy; 1994. Vagbatt, Astang Hridya, Vidvanamanoranjini; p. 37.
7. Hahnel E, LichterfeldA, Blume-Peytavi U, et al. The epidemiology of skin conditions in the aged: systematic review. J Tissue Viability 2017;26:20-8.
8. Durai PC, Thappa DM, Kumari R, Malathi M. Aging in elderly: Chronological versus photoaging. Indian J Dermatol 2012;57 :343-52
9. IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320-1959,p- ISSN: 2320-1940 Volume 6, Issue 6 Ver. V. (Nov.-Dec .2017), PP 12-18 www.iosrjournals.org
10. Anonymous. The Ayurvedic Pharmacopoeia of India, Part II, vol . I, 1st ed. New Delhi: The Controller of Publications, Government of India; p. 80.
12. Anonymous.
11. Vagbhata; Astanga Hridaya with Sarvaga Sundari commentary, Krishnadas academy, Varanasi 1995.Sutra 16/18- page 247
12. Vagbhata; Astanga Hridaya with Sarvaga Sundari commentary, Krishnadas academy, Varanasi 1995.Sutra 16/18- page 246
13. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary, Choukhamba Sanskrit series.Varanasi.1994.Sutra Sthana 13/61 -page-85

MANOVAHASROTOVIKARAS IN GERIATRICS

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ABSTRACT:

Geriatrics, speciality that deals with health of elderly is to be looked out with outmost priority. Mental health and well being are important in older age as at any other stage of life. It is important to recognize and treat mental disorders in older adults. Ayurveda deals with geriatrics under jara chikitsa which is one among eight branches of Ashtanga ayurveda where diseases, conditions associate with old age and their treatment is elaborated. Concept of manas and manovaha srotovikaras, its influence on the over all health of an individual has been well explained in our science. This review is a humble attempt to explore and throw light on the manovaha srotovikaras in geriatrics.

KEY WORDS: Ayurveda, Manovaha srotovikaras, Jara, Mental health, Geriatrics.

INTRODUCTION:

Over 20% of adults aged 60 and over suffer from a mental or neurological disorder and 6.6% of all disability among people over 60 years is attributed to mental and neurological disorders. In ayurveda manas and manasika vikaras explained with prime importance. The term manas indicates sense of gyana ie knowledge thinking, indicating, perceiving, In ayurveda bhava (presence or appearance) and abhava (absence or non appearance) of gyana has been attributed as the lakshana of manas. In geriatrics there is a constant decrease in these lakshanas leading to manovaha sroto dushti causing different manovaha srotovikaras.

METHODS

Literature research was done regarding manas, manovahasrotas as well as jara janya vyadhis from brihatrayis. References were collected and compiled.

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Tridoshas govern all the metabolic activities. When vata is out of balance metabolism will be disturbed resulting in excess catabolism which is the breakdown or deterioration process in the body. When anabolism is greater than catabolism there is an increased rate of growth and repair of the organs and tissues. Excess pitta disturbs metabolism, excess kapha increases rate of anabolism and excess vata creates emaciation. Thus in jara there is derangement of the physiological functions of tridoshas. Vata being the supreme controller of the body not only shows its influence at physical and physiological level but also at psychological level ie it regulates smooth functioning of manas or mind. Vata is vitiated physiologically in vriddhas it directly or indirectly disturbs the dual roles of manas. Due to vata prakopa satwa declines with age leading to decrease in its normal powers of grahana dharana vachana smarana and Vijnana and susceptibility to other vikaras by the doshas such as pralapa due to vata, manobhramsa due to udanakopa bhaya shoka dainya due to vata prakopa etc. This accounts for the increasing incidence of dementia, delirium, and depression with advancing age. Alzheimer's disease is an age associated progressive neurodegenerative disease that is characterized by severe memory loss, personality changes and an over all decline in cognitive function which is due to affliction of manovaha srotas. Indriyabhigraha which is an important karma of manas is affected during jara avastha.

CONCLUSION:

As per discussion, affliction of different manovahasrotovikaras in geriatrics is an area of concern and importance. Depending on the type of affliction different

treatment modalities can be adopted for manovaha sroto shudhi. Manodoshoushada sangrahas are to be given taken care of primarily, Thereafter following hitopachara, sadvruta, achara rasayana can bring down manovikaras in jara upto a marked extent.

REFERENCES:

1. Shastri S.CharakSamhita.Vol 1.Varanasi,Uttar Pradesh:Chaukhambha Bharati Academy:2002.Sharirsthan 1
2. Shastri S.CharakSamhita.Vol 1.Varanasi,Uttar Pradesh:Chaukhambha Bharati Academy:2002.Indriyasthan 5
3. Shastri S.CharakSamhita.Vol 1.Varanasi,Uttar Pradesh:Chaukhambha Bharati Academy:2002.Chikitsasthan 9

MANOVAHA SROTA VIKARA IN GERIATRIC DISORDER

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ABSTRACT:

21st century is the country of Psychosomatic Disorders and SADD syndrome (Stress, Anxiety, Depression and Disease). The real (physical), Bouddhik (Intellectual), Bhavanatmak (Emotional), Samajik (Social), Adhyatmik (spiritual), Vyavsayik (occupational), Paryavaran (environmental). According to ayurveda ageing is in evitable outcome of kala or Parinaam, healthy balance of the mind and body is given utmost importance in Ayurveda. Geriatrics is a progressive irreversible phenomena of body rather than disease in which the body loses its ability to respond to a challenge to maintain homeo-stasis. In Ashtanga Ayurveda “Jara” is incorporated at 7th number among its eight branches. Major causes of more morbidity and mortality among geriatrics is chronic inflammatory and degenerative conditions such as arthritis, diabetes osteoporosis, hypertension, diabetes depression psychiatric disorder, Parkinson’s disease and age-related pathies. Conventional system of medicine is not very satisfactory in this problem has lack of holistic and comprehensive approach towards psycho somatic metabolic diseases. Ayurveda has potential and interventions to resist disease occurring in degenerative face and improves physiological processes Compensates age-related biological losses in mind, body altogether affords rejuvenating effect to a remarkable extent. mental health concern that may touch most people's life directly or indirectly, affecting 350 million people worldwide. It can affect an individual's ability to figure, variety of relationships, and destroy their quality of life.

Introduction:

Mind is the organ or seat of consciousness, the faculty or the function of the brain by which an individual becomes aware of his surroundings and by which he experiences feelings, emotions & desires and is able to attend, to remember, to-learn, to reason and to decide. For ages, mental health has been important to

humankind. This is more so in the present century, which has been termed as the age of anxiety. Mental health is vital to individuals, families and society.

Manas roga

Manasa-Roga (mental disorder) generally refers to an abnormal mental condition available in the Ayurvedic classics, Manasa Roga is an abnormal mental condition characterized by- (1)

- Impairment of Manasa Karma (general mental functions) like Indriyabhigraha, Swasyanigraha, and Vichara."
- Impairment of Buddhi, Smriti, Sangya Gyana, Bhakti, Sheela, Cheshta, Achara separately or in combination.
- Presence of Alpasattva (weak will power).(2)
- Vitiating of Dosha, specifically Manasa Dosha.
- Involvement of both Adhishthana viz. Manasa and Sharira or Manasa alone.

Etiological factor for Manasa- vikaar (3)

Ayurvedic approach towards understanding of illness is very fundamental and deep rooted.

Basic 3 fold causes viz. Unwholesome contact of Kala, Buddhi and Artha i.e.

a) Parinama (time factor including chronological errors)

b) Pragyapradha (Intellectual blasphemy).

C) Asatmendriyarth Samyoga (Incompatible contact of sense organs with their objects).

- Sadvritta Apalana (not following good conduct).
- Vegavidharana.
- Purvajanmakrit.
- Prakriti Viparyaya.
- Ishtasyalabhat and Anishtasya Labhat.

Samprapti-

Aetiological factors primarily vitiate Rajasa and Tamasa (Manasa Doshas) which afflict Hridya (the seat of intellect) of Alpa Satva person (weak will power) and cause Manovaha Srotodushti (vitiate psychic centre emotions etc.) and give rise to Manasa Roga.

Salient Geriatric Psychic Ailments Characteristics (4)

- Impairment of Manasa Karma (general mental functions) like Indriyabhigraha, Swasyanigraha, and Vichara.
- Impairment of Buddhi, Smriti, Sangyagyana, Bhakti, Sheela, Cheshta, Achara separately or in combination. (5)
- Presence of Alpasattva (weak will power).
- Vitiating of Dosha specifically Manasa Dosha.
- Involvement of both Adhishthana viz. Manasa and Sharira or Manasa alone

Adjuvantly we can compose as (6)

1- Vyamoha (Delusion)- state of false belief, commonly found in senile psychosis & Depressive state.

2- Avastu Bodhan (Hallucination) & Bhrama (Illusion) - State of false Perception.

3-Pravartan (Regression)-State of childish behaviour in advanced

age. 4-Manovaigyanik Kasth (Psychological Ailment)

5-Smriti Vyatikram (Memory Disorder)

6-Sanvegatmak Vyatikram (Emotional Disorder)

7-Visaja Angika Pratikriya (Toxic Organic Reaction)

8-Antardrishti Abhav (Lack of Self Mirroring)

1-Disease due to primary involvement of Rajas and Tamas (7)

These are emotional disorders. They may themselves act as diseases, symptoms of diseases or causes of various mental disorders.

Acharya Charaka has enumerated the following psychiatric symptoms caused by Rajasa and Tamasa.

- i) Kama (Lust)
- ii) Lobha (Greed)
- iii) Krodha (Anger)
- iv) Moha (Delusion)
- v) Irshya (Jealousy)

- vi) Mana (Pride)
- vii) Mada (Neurosis)
- viii) Shoka (Grief)
- ix) Chita (Depression)
- x) Chitodvega (Anxiety)
- xi) Bhaya (Fear or phobias)
- xii) Harsha (Euphoria).

Along with these diseases Vishada (anguish), Dainya (meanness), Abhyasuya (envy), Matsarya (malice) have been mentioned .

2- Diseases which are produced due to the involvement of Rajasa and Tamasa along with Vata, Pitta and Kapha.

- i) Unmada (Psychosis)
- ii) Apasmara (Epilepsy)
- iii) Atattvabhinivesha (Obsession)
- iv) Apatantraka (Hysteria)
- v) Bhrama (Vertigo)
- vi) Tandra (Drowsiness)
- vii) Kama (Neurasthenia)
- viii) Mada (Psychoneurosis)
- ix) Murchha (Fainting)
- x) Sanyasa (Coma)
- xi) Madatyaya (Alcoholism)
- xii) Gadodvega (Hypochondriasis)

3-Psychiatric illnesses related with personality defects-The patients of mental deficiency and personalities come under this category.The psychopathic personality, the characteristic feature of Rajasa Prakriti and Tamasa Prakriti includes individuals with mental deficiency like Sattvaheenta, Amedhata, Vikrita sattva, Psychosomatic Illness. Sometimes they are normal with this type of

personality and very often among geriatrics mental-deficiency may occur due to a disease. The causative factors in these diseases are emotional factors or psychic factors with manifestation of clinical features predominantly at somatic level. These are as follows.

- Bhayajatisara (Diarrhoea due to fear)
- Shokajatisara (Diarrhoea due to grief)
- Shokaja Jwara (Pyrexia due to grief)
- Kamaja Jwara (Pyrexia due to passion)
- Krodhaja Jwara (Pyrexia due to anger)
- Shokaja Shosha (Wasting due to grief)
- Dwishtartha Samyogaja Chhardi (Emesis due to unfavourable objects)
- Manasa Arochaka (Tastelessness due to mental disturbance) (8)

Examination of Geriatric Mental status

We do not have the precise tools to assess the state of mental health unlike physical health.

"Unmadam Punar Manobuddhi Sangyagyana Smriti Bhakti Sheela Cheshtachara Vibhramam Vidhyat'(9)

Ashtvidha Sattva Pariksha-(eight fold mental status examination has been prescribed to examine a psychiatric patient.,10.

Deranged or unsettled conditions of Manah (mind), Buddhi (intellect or decision), Sangya Gyana (orientation and responsiveness), Smriti (memory), Bhakti (desire), Sheela (habit or temperament), Cheshta (psychomotor activity) and Achara (conduct) result in manifestation of psychosis.

- Identity Basic Detail
- Psychiatric assessment
- Avedaka (Informant)
- Pradhana Vedana Complaint)

- Vedanavrittam (History of present illness)
- Purvavyadshivrittam (Medical history)
- Kulavrittam (Family history)
- Sheela (Habits, temperaments)
- Cheshta (Psychomotor activity)
- Achara
- Manah
- Buddhi (Decision)
- Smriti (Memory)
- Sangya Gyanam (Orientation and responsiveness)
- Bhakti (Desire)
- Prakriti (Constitution)
- Sattva - Parilisha (Mental Stamina)

Pathological & Radiodiagnosis - Routine Blood and Urine Screening.

- Electrophysiological
- Geriatric depression scale (GDS)
- (EEG, EMG)
- Brain Imaging test (CT, MRI, PET) (10)

Management & Measures

Samanya chikitsa -Nidana Parivarjan –

The first and foremost principle in the management of any disease is to avoid and eliminate causative factors. The rules which are to be followed to avoid any disease have been summed up as follows: ⁽¹¹⁾

- a) Sadvritta-Palana (following good conduct) and Achara Rasayana.
- b) Samyaka Vega Dharana and Udirana (proper restraining and elimination of natural urges).
- c) Wholesome contact of Kala, Buddhi and Indriyarthas.
- d) Observance of the rules of diet, lifestyle and exercise.
- e) Avoidance of Pragyapradha

In Ayurvedic system of medicine chikitsa has been categorized into two broad divisions viz. Laukiki Chikitsa & Naisthiki Chikitsa.

A- Laukiki chikitsa (Swasthyadayini Chikitsa)- It refers to the treatment of a disease or ailment affecting an individual in mental and physical dimensions. The types of Laukiki Chikitsa as mentioned below:

1. Daiva Vyapashraya (Divine Therapy)- To combat daivakrit diseases. It is a sort of faith therapy derived mainly from Atharvaveda.

2. Yuktivyapashraya (Rational therapeutic measures for the Therapy)- Here the method of treatment is based on reasoning and proper planning. Hence, it is more scientific and rational therapy and it is planned treatment based on fundamental principles of Ayurveda.(12)

Evident Based Medications-(13)

1-Shiro Abhyanga, Shiropichu, Shirodhara with Himsagar tail, Bramhi

taila 2-Single Drug Bramhi, Sankhpushi, Jatamamsi, Giloy, Ashwagandha etc.

3-Churna- Shatavari Kalp, yasthimashu churna, Saraswati churna

4-Vati-Prabhakar, Chandraprabha, Bramhi

5-Bhasm-Muktapishti, Muktabhasm

6-Rasaushadhi- Yogendra rasa, Smritisagar, Vatakulantak rasa, Kamdugdha management of mental ailments can be as follows and while treating the patients especially mentally ill persons, the course of conduct related to Trivarga i.e. Dharma (virtue), Artha (wealth) and Kama (desire) should be followed. This is the spiritual dimension of ayurveda refers to absolute eradication of vedana (miseries) that can be attained by the elimination of desires (Upadha) which are root cause of miseries. (15)

7-Asava/Arista-Drakshasava, Aswagandharista,

Saraswatarist 8-Tail/Ghrita-bramhi, kalyanak, Himsagar taila

3. Sattvavajaya (Psychotherapy)- To control the mind by withdrawing it from undesired objects.(14)

B-Naisthiki Chikitsa- Ideal

Therapeutic measures for the management of mental ailments can be as follows and while treating the patients especially mentally ill persons, the course of conduct related to Trivarga i.e. Dharma (virtue), Artha (wealth) and Kama (desire) should be followed. This is the spritual dimension of ayurveda refers to absolute eradication of vedana (miserries) that can be attained by the elimination of desires (Upadha) which are root cause of miseries. (15)

Other supportive measures for prevention-

The Achara Rasayana guide laid out in Charaka Samhita encourages a moral path of integrity which directly relates to an individual's state of health. When our thoughts are positive, the actions we perform are conscientious, and the words we speak are uplifting we create a biome for our physical and mental bodies to function optimally. Achara Rasayana not only cleanse the subtle body, but they also refine the physical body by giving favourable impressions to the sense organs. This is something beautifully unique to Ayurveda, the idea that our thoughts, words, and actions have a paramount impact on the restoration of health and wellbeing. It sharpens the intellect thereby enabling the individual in restraining from prajnaparadha.

- Practices of Yoga -"Yogo Moksha Pravartakah" ie. by Yogic practices one can attain the state of Moksha, Process of increasing Sattva and decreasing Rajasa & Tamasa.
- Relaxation -Relaxation is a mean of getting free from stress. Meditation, Shavasana and Yoganidra have been found very effective in alleviating stress and ultimately resulting in good mental health.
- Saddvritta Palana (Good conduct)- Acharya Charaka has laid down the rules that are to be followed and by which one can attain good health and control over sense faculties.
- Vega Vidharana-The impulses of greed, fear, anger, jealousy, excessive attachment and malice are the emotional factors that should be overcome.
- Manokshobha Chikitsa- Psycho-shock therapy-To manage acute episodes of Unmada by inducing physical pain and mental shock bring deranged mind back to normalcy.
- Samadhi (Mental equanimity or concentration)-Gyana-Vigyana or Atmadivigyana altogether concentrating or fixing the mind into the soul after withdrawal of mind from its objects.

Dravyabhuta Chikitsa ⁽¹⁶⁾

| | | |
|-----------------------|-----------------------|------------------------|
| Antah Parimarjana | Bahih Parmimarjana | Shastra Prannidhana |
| Shodhan chikitsa | Sneha | Shastra karma |
| Shanamana chikitsa | Sweda | Rakta Mokshana |
| | Anjana | |
| | Nasya | |
| | Dhupana | |

Aravyabhuta chikitsa ⁽¹⁶⁾

| DAIVA VYAPASHR AYA | SATWAVAJ AYA | LIFESTYLE MODIFICA TION |
|--------------------|------------------------------|---|
| Mantra | Assurance | Nidana parivar jana |
| Oshadhi | Emotion Replacement | Satmya kala- Buddhi- Indriya- Artha sannikarsha |
| Mani Dhaarana | Regulation of thought | Samyak vega Dharana |
| Mangala | Retraining the ideas | Udeerana |
| Bali | Channelizing Presumption | Upadha |
| Upahaar | Guidance | Practice of |
| Homa | Advice in decision taking | Relaxation |
| Niyama | Control of Temperament | Sadvritta &Sadaachara |
| Upavasa | Shock Therapy | |
| Prayashchitta | Fear Therapy | |

Preventive Measure for promotion of Mental Health in Geriatrics --(Manasa Swasthya)⁽¹⁷⁾

The practices described for promotion of mental health i.e.purity of Manasa and its activity in Ayurvedic texts include -

- Sadvritta Palana
- Achara Rasayana Sevana
- Dharniya Vega Vidharana
- Promotion of Gyana &vigyana
- Replacement of emotions (Pratidwandwatmaka)
- Medhya and Divya Rasayana Sevana
- Yoga Sadhana
- Ashvasana, Suhrid-vakya,
- Santvana
- Naishthiki Chikitsa
- Promoting Mental Health

Conclusions

Rapid changes-in globalizing world associated with urbanisation in the new millennium have resulted in newer type of stressors and the streamlining of an inclusive society towards patients of psychiatric illness is critical as a social web.

Ayurveda called jara (old age) as swabhavika vyadhi.It is a natural phenomenon of physiological change since birth ,these metabolic changes have a significant impact over nervous system which manifest several disorders in geriatrics. Atherosclerotic changes in advance age leads to poor perfusion of blood in tissues which hamper"s significant nutrition and changes pathology which leads to ailments. In advanced age people comprising of financial as we all as poor health which if a predisposing cause of disorders among them. The Basic difference between the modern and Ayurvedic approach is that, while modern system promote relaxation by blocking awareness of a stressful event, ayurvedic approach as described earlier makes one to realize the situation and adopt suitably to solve the Geriatric mental problems in a refreshing way for ever. The only key available to solve these problems of Manas is to adopt Ayurveda as a way of life. Its humanistic and holistic approach covers all the shades of life and living.

REFERENCES:

1. He Psychosomatic Axis in Ayurved treatment-Dr. S. Suresh Babu, Chaukhambha, Krishnadas Academy
2. Sharma, Ram, Karan, Das, Vaidya, Bhagwan.(2009). CharakaSamhita of Agnivesa, Editor, (Istn Ed.), Vol. I SutraSthan, Dhirghanjeevitiya Adhyaya: Chapter1, Verse 42 varansi chaukhambha Krishnadas academy, 25
3. 3-Sharma R. K, Das B., Unmadachikitsitam, Reprint, Chaukhambha Sanskrit Series Office, Varanasi, 2012; 410. Agmivesha's Charak Samhita.
4. Vaidya Vilas Nal Manas Roga & Ayurved
5. Yadav ji Trikam ji Acharya, Charak Samhita with Ayurveda Dipika Commentary of Chakrapani Datta,Charak Samhita Nidan sthan 7/5, Chaukhambha Surbharti Prakashan,Varanasi.
6. Prof. Ajay Kumar Sharma, Psychotherapy (Sattvavajaya Chikitsa) in Ayurved.
7. Sharma, Ram Karan, Das, Vaidya, Bhagwan, Charaka Samhita of Agnivesha, Varanasi. Chaukhambha Krishnadas academy, 2009.
8. Yadav ji Trikam ji Acharya, Charak Samhita with Ayurveda Dipika Commentary of Chakrapani Datta, charak Samhita Sharira sthana Chapter 1 verse 30,chaukhambha Surbharti Prakashan, Varanasi.Pp 534
9. Sharma R. K, Das B., Unmadachikitsitam, Reprint, Chaukhambha Sanskrit Series Office, Varanasi, 2012; 410. Agnivesha's Charak Samhita.
10. <https://www.nhp.gov.in/> Manovasada (Depression)_mtl>12 feb 2016.
11. Datta C. Charaka Samhita Trans. Sharma RK and Dash B, Sutra Shana, Chowkhambha Sanskrit Series Office,Varanasi,India,2008;1•25,33,1 64, 220, 426,362,302,40,41,43,230,381
12. <https://www.nhp.gov.in/Manovasada> (Depression)_ mtl >12 feb2016.
13. Ayurvediya Manoroga Chikitsa

14. Shri Satya Narayan Shastri Charak Samhita of Agnivesha revised by Charaka & Dridhbala, Sutra Sthana 1 Chaukhambha Bhartin Acedamy, Reprint edition 2013, pp 35
 15. Naisthiki Sharma, Ram, Karan, Das, Vaidya, Bhagwan. (2009). Charaka Samhita of Agnivesa, Editor, (1» Ed.), Vol. II Sharira Sthan; Katidhapurusheeya Adhyaya: Chapter1, Verse 94-95. Varanasi: Chaukhamba Krishnadas Academy, 335.
 16. Dr. P. V. N. R. Prasad and Dr. K. J. Lavanya Lakshmi, ayurvedic management of mansika Roga with reference to Achara Rasayana.
 17. R. Vidyanath, A stanga Iridaya, Varanasi, Chaukhamba S urbharati Prakashan, 2013.
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A CONCEPT OF SCHIZOPHRENIA AS A JARA VYADHI

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ABSTRACT

Schizophrenia in late life is a serious illness. It is profoundly disabling for most people with the disease, and care for these patients places great pressure on health care systems. Schizophrenia in geriatric patient emerging as a major public health concern worldwide. We discuss about JaraAvastha and Aging. Jarachikitsa is the branch of Ayurveda which deals with the problem of elderly patient Schizophrenia is characterized by disturbances in thought, verbal behavior, perception, affect, motor behavior and relationship to the external world. According to Ayurveda, schizophrenia can be correlated with Unmada (mental disorder).

Key words: Schizophrenia, Jara, Ageing, Unmad

INTRODUCTION

Schizophrenia is a serious mental disorder in which people interpret reality abnormally. Schizophrenia is characterized by disturbances in thought, verbal behavior, perception, affect, motor behavior and relationship to the external world. Schizophrenia may result in some combination of hallucinations, delusions, and extremely disordered thinking and behavior that impairs daily functioning, and can be disabling.¹ About 0.3% to 0.7% of people are diagnosed with schizophrenia during their lifetime.² Schizophrenia affects about 1 percent of the elderly population in the world. Among persons aged 60 years and older with mental and substance-use disorders, schizophrenia ranks third in causes of disability-adjusted life-years.³ Women are more likely to have late-onset schizophrenia than men. Mental illnesses are diseases that cause mild-to-severe disturbances in thought and/or behavior, resulting in an inability to cope with life's ordinary demands or routines.

Jara (ageing) is considered as natural phenomenon like hunger, thirst and sleep

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Jara (ageing) is considered as natural phenomenon like hunger, thirst and sleep⁴. Ayurveda explains Ageing process starting from birth to death as Vaya (chronological ageing). It is classified in to three stages i.e. Balya, Madhyama and

Jaraavastha. For that age limit is considered up to 30yr, 30 to 60 (up to 70 yrs. by Shushruta) respectively⁵. After sixty years of age one is called 'old'. In old age there is a progressive diminution of Dhatu, strength of sense organs, vigor, masculinity, bravery, power of understanding, retaining and memorizing, speech and analyzing facts. There is gradual diminution in the qualities of Dhatu also.⁶

MATERIALS AND METHODS

Schizophrenia is a chronic relapsing psychotic disorder that primarily affects thought and behavior. Those individuals who are diagnosed with schizophrenia at the age of 45 or older are classified as late-onset schizophrenia. The clinical presentation of geriatric persons with schizophrenia differs somewhat from that of younger persons. It has been suggested that late-onset schizophrenia is a neurodegenerative condition, results from acquired brain lesions, or is secondary to sensory deficits and interpersonal isolation. Such theories suggest that patients with late-onset schizophrenia have relatively normal brain and psychosocial functioning before the onset of this triggering changes.⁷

Clinical presentation of Schizophrenia:

The period when symptoms first start and before full psychosis is called the prodromal period. It can last days, weeks, or even years. In this period symptoms like A change in mood, memory issue, Social withdrawal, Trouble concentrating, Temper flares, Difficulty sleeping.⁸ It has been commonly understood that positive symptoms of schizophrenia decline in later life, while negative symptoms. In geriatric Patient Positive symptoms like Delusion, Hallucination, Catatonia and negative symptoms like less energy, speaking less, poor hygiene and grooming habits, loss of interest in life are seen. Geriatric person with schizophrenia have significant cognitive deficits in executive functioning, speed of processing, attention/vigilance, working memory, verbal learning, visual learning, reasoning, and problem-solving⁹.

Ayurvedic aspect of Schizophrenia⁵

In Ayurveda all type of mental disorders are classified under the heading of 'Unmada'. According to Ayurveda, 'Unmada' (psychosis including Schizophrenia) is a disorder of mind caused by imbalance or vitiation of Dosha's (morbid matter) i.e., Vata, Pitta and Kapha. Based on the vitiation of particular Dosha different types of Unmada like Vatajaunmada, Pittajaunmada and Kaphajaunmada, Sannipatajunmada have been described in Ayurvedic classics. As per Ayurvedic texts, vitiation or Unmarga (deviation) of Doshas and imbalance in inner energy are the major cause of Unmad. Acharya Charaka defines Unmada as the impairment in function of the eight aspects or faculties that make up a human being viz., Manah (psyche/mind), Buddhi (intellect), Sanjna, Jnana

(knowledge/perception/ cognition), Smruti(memory), Bhakti (inclination), Sheela (Character/Nature/habits), Cheshta (psycho-motor activity/behaviour) and Achara (Conduct/Behavior),

Samprapti¹⁰:

The Doshas vitiated by unwholesome food, regimes and other causative factors in an individual with Alpa Satva mounts upwards through Manovahasrotas and vitiate Hrudaya, which is the seat of Buddhi, and disturb Manas occluding Manovahasrotas. As a result, Chitta is disturbed. This in turn causes loss of Buddhi due to which the individual loses the power of discrimination and indulges in faulty activities. And this disturbed state is referred to as Unmada.

Vibhrama of mind begin in the subtlest levels, often due to Prajnaparadha which leads to imbalance in Manogunas, which gradually grows with further interaction with physical, psychological, social, economical and environmental stressors and begin to manifest in gross level which is expressed in the form of Vibhrama's which constitute Unmada.

Lakshana¹¹:

Depending on the Dosha involved, people with schizophrenia experience the following symptoms:

Vataja Unmada: Symptoms of Vata-related Unmada include singing, talking, laughing or bursting out inappropriately or imitating the sounds of musical instruments. Memory loss is also a major symptom of this type of Unmada.

Pittaja Unmada: People with Pitta-related Unmada show symptoms such as anger, threatening behaviors, and indigestion after eating sour, hot or pungent foods. All the symptoms worsen at night.

Kaphaja Unmada: People with Kapha-related Unmada lack the desire to eat and loves solitude. Mental symptoms worsen at night after dinner. Vomiting, depression, lack of motivation and passivity are some of the other symptoms seen in Kapha-related

Sannipataja Unmada: In the Unmada caused by the combined vitiation of all three Doshas, symptoms of Doshas will be seen.

DISCUSSION

As noted by Psychiatric professionals, schizophrenia is not yet a simple disease. The risk of mortality is two to three times greater in patients with schizophrenia than in the general population, and this gap has been increasing over the past decades². In geriatric person with schizophrenia, the mortality rate and deaths caused by suicide and accidents are higher than in healthy peers. Schizophrenia is a mental condition

characterized by hallucinations, depression, mood swings and delusion. It affects thinking and perceiving skills which ultimately alters behavior. Schizophrenia refers to a mental condition here the person loses their senses and often believes in imaginary things and situations. It is a long lasting and serious type mental disorder that affects person's thinking, feelings and behavior. According to Ayurveda, schizophrenia cannot be correlated with a single type of mental disorder but schizophrenia symptoms match with the symptoms of many types of Unmada (mental disorder). Ayurvedic medicine views psychotic disorders (schizophrenia) as the imbalance of energies on an inner level.

Neurotransmitter and immune system abnormalities have been seen in Unmada and schizophrenia both. Now a day very important to diagnose mental illness in geriatric person for their healthy mental status.

CONCLUSION:

Schizophrenia in late life is a serious illness. It is profoundly disabling for most people with the disease, and care for these patients places great pressure on health care systems. As per the description in Ayurvedic texts, the Nidana (Cause), Lakshana (Symptoms), Samprapti (Pathogenesis) And Sadhya-Asadhyata (Prognosis) of Sannipataja Unmada resembles the course and presentation of Schizophrenia. Schizophrenia in geriatric patient Ayurvedic line of treatment of Unmada is very usefull. We can say that Schizophrenia is related with the Sannipataja Unmada.

REFERENCES:

1. <https://www.mayoclinic.org/diseases-conditions/schizophrenia/symptoms-causes>
2. Javitt DC (June 2014). "Balancing therapeutic safety and efficacy to improve clinical and economic outcomes in schizophrenia: a clinical overview". *The American Journal of Managed Care*. 20 (8 Suppl): S160-5. ((PMID25180705
3. Cohen CI, Meesters PD, Zhao J. New perspectives on schizophrenia in later life: implications for treatment, policy, and research. *Lancet Psychiatry*. 2015;2:340-350.
4. Sushruta. Sushruta Samhita, Sutra Sthana chapter 1, verse no 25. 4th edition reprint. Varanasi; Chaukhambha Orientalia; 1980:6
5. Agnivesha. Charaka Samhita, ViamanaSthana chapter 8, verse no122. 1st edition reprint. Varanasi; Chaukhambha Sanskrit Sansthan; 1994:280

6. Caraka. Caraka Samhita (Vidyotini Hindi Commentary), Vol.1. Sastri KN, Caturvedi GN, editors.1st ed. Varanasi: Caukhambha Bharati Academy; 2001. Vimanasthana, 8.p.781-782.
7. Older Patients With Schizophrenia: Challenges in the Coming Decades Barton W. Palmer, Ph.D., Shelley C. Heaton, B.A., and Dilip V. Jeste, M.D. Published Online:1 Sep 1999<https://doi.org/10.1176/ps.50.9.1178>
8. Schizophrenia: An Overview/ webmed.com
9. Rajji TK, Mulsant BH. Nature and course of cognitive function in late-life schizophrenia: a systematic review. Schizophr Res. 2008;102:122-140.)
- 10.<https://vikaspedia.in/health/ayush/ayurveda-1/ayurveda-based-dietary-guidelines-for-mental-disorders/mental-disorders-concepts>
11. <https://www.myupchar.com/en/disease/schizophrenia/ayurveda>

CLINICAL EXAMINATION IN GERIATRIC DISORDER

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The geriatric assessment is a multidimensional, multidisciplinary assessment designed to evaluate an older person's functional ability, physical health, cognition and mental health, and socioenvironmental circumstances. It includes an extensive review of prescription and over-the-counter drugs, vitamins, and herbal products, as well as a review of immunization status. This assessment aids in the diagnosis of medical conditions; development of treatment and follow-up plans; coordination of management of care; and evaluation of long-term care needs and optimal placement.

The history and physical examination is the foundation of the medical treatment plan. The interplay between the physiology of aging and pathologic conditions more common in the aged complicates and delays diagnosis and appropriate intervention, often with disastrous consequences. This chapter assumes that practitioners will perform the thorough history and physical examination that is expected of an excellent general internist. It highlights the special considerations required for the older adult.

History

General considerations

The history may take more time because of sensory or cognitive impairment or simply because an older patient has had time to accrue numerous details. Several sessions may be required.

The patient should be recognized as the primary source of information. If doubts arise about accuracy, other sources should be contacted with due respect paid to the

sensitivities and confidentiality of the patient. When interviewing the patient and caregiver together, ask questions first to the patient, then to the caregiver.

If the patient's responses to initial questions are clearly inappropriate, turn to the mental status exam immediately.

The patient should be dressed and seated. The physician should also be seated and facing the patient at eye level, speaking clearly with good lip movement. If the patient is severely hearing impaired and an amplifier is not available, write questions in large print.

Areas requiring special emphasis

- **Function**-- Pay attention to deficits in basic and instrumental activities of daily living (ADL). Prepare to assess those systems in the physical examination, looking for reversible conditions that could upgrade function, e.g., treatment of arthritis to improve dressing capability.
- **Medications**- Polypharmacy and excessive dosages are common causes of iatrogenic illness. A "paper bag" test is often useful to explore this possibility, i.e., ask the patient or caregiver to gather all medications into a paper bag and bring it to the office visit. Be sure to include over-the-counter (OTC) preparations.
- **Review of systems**--Cardiovascular illness is the major cause of death in older adults and these systems should be investigated thoroughly. Of particular importance also are: weight change and gastrointestinal (GI) symptoms, headache (temporal arthritis), dizziness and falls, sleep pattern, sensory impairment, constipation and other changes in bowel habits (colon cancer), urinary pattern and incontinence, sexual dysfunction, depression, cognitive impairment, transient paralysis, paresthesias or visual changes (transient ischemic attack), musculoskeletal stiffness or pain (osteoarthritis or polymyalgia rheumatica).
- **Social history**-- Assessment of lifestyle, affect, cognition, function, values, health beliefs, cultural factors and caregiver issues is also important. Consultation with a social worker in obtaining this information and adapting the care plan is often critical but the initial identification of need for such consultation is part of the primary care evaluation. A home visit is often very valuable (see *Interacting with Long Term Care Systems*, pp. 53-56).
- **Nutritional history**-- Performing the basic nutritional assessment will identify patients at risk of malnutrition and in need of referral for dietetic consultation.

Physical Examination

General considerations

Limit the time the patient is in the supine position as this may cause back pain for persons with osteoarthritis or kyphoscoliosis and shortness of breath for those with cardiopulmonary disease--having several pillows on hand for these patients will be greatly appreciated.

Multiple sessions may be required for a complete physical exam due to patient fatigue. While they are important, the rectal and pelvic exams may be deferred to a later session, if not urgently required.

Areas requiring special emphasis

- **General Observation and Vital Signs**

Check:

- a. Signs of ADL deficits, poor hygiene, disheveled appearance.
- b. Rectal temperature if patient is seriously ill because of blunted immune response.
- c. Orthostatic changes in blood pressure (BP) and pulse.
- d. Osler's maneuver if systolic BP is greater than 160 to screen for "pseudohypertension"-positive if radial artery is palpable with cuff inflated above systolic BP level.
- e. Weight (at each visit to identify losses early and to establish a pattern).
- f. Signs of malnutrition or trauma (elder abuse and neglect or falls).
- **Skin**--Neoplasm (especially in sun exposed areas), nipple retraction, peau d'orange.
- **HEENT**--Visual acuity, lens exam for cataracts, fundoscopy (glaucoma, hypertension, diabetic retinopathy), visual fields, extraocular movements (stroke).
 - a. Gross auditory acuity, otoscopy to determine possible reversible causes of hearing loss and disequilibrium (cerumen impaction, serous otitis media, ruptured tympanic membrane).
 - b. Inspect the mouth after removal of dentures to assess conditions that may affect nutrition (neoplasm, stomatitis, oral health, adequacy of dentures).
 - c. Palpate temporal artery for tenderness, thickening or nodularity in the patient complaining of headaches.
- **Neck**
 - a. Dix-Hallpike positional test maneuver for benign positional vertigo.
 - b. Jugular venous pulse is better observed on the right side since compression of the

left innominate vein by an elongated aortic arch may cause false distension on the left.

- **Cardiovascular**

a. PMI may be displaced by kyphoscoliosis, so palpation is less reliable to determine cardiomegaly. Atrial and ventricular arrhythmias are common. Systolic murmurs are frequently present and most are due to benign aortic sclerosis. Symptoms, risk of morbidity and special characteristics that suggest aortic stenosis or endocarditis should guide evaluation. Diastolic murmurs are always important, as are right and left ventricular S3 gallops.

b. Signs of arterial insufficiency (hair loss, bruits, decreased pulses) and venous disease (stasis skin changes and edema) are common. Arterial ulcers present distally with claudication and ischemia while venous ulcers present painlessly and are usually located near the medial malleoli. Most peripheral edema is venous insufficiency not congestive heart failure (CHF) although the latter is common and should be ruled out. (The effects of diuretics on perfusion and electrolyte balance usually outweigh cosmetic benefit.)

- **Lungs**--Age-related changes in pulmonary physiology and age-associated pulmonary pathology often result in rales that may not indicate pneumonia or pulmonary edema. For this reason, it is important to document a baseline exam at a time when the patient is not ill. Localized wheezes may indicate an obstructing bronchial lesion (carcinoma).

- **Breast exam**--Tumors may be easier to palpate because of atrophy and less fibrocystic disease. Remember, men may have gynecomastia or malignancy.

- **Abdomen**

a. Patients who are unable to lie flat (kyphoscoliosis or cardiopulmonary disease) may give the impression of distension. This phenomenon and commonly occurring pulmonary hyperaeration may cause the liver edge to be palpable below the costal margin without hepatomegaly. This must be assessed by percussion.

b. Peritoneal signs may be blunted or absent in frail elderly patients.

c. Palpation will assess urinary retention (bladder can be percussed also) or aortic aneurysm. Ventral, inguinal and femoral hernias should be checked for reducibility. The sigmoid colon will often be palpable and a fecal impaction may present as a left lower quadrant mass.

- **Extremities**--Arthritis (rheumatoid, degenerative and crystalline), deformities, contractures, injuries, podiatric care, poor hygiene all increase the risk of pain, infection and gait disturbances. Although basic gait assessment adds little time to the examination, it yields information that has impact on independent function and

guides consultation with rehabilitation professionals. Invest in a good pair of nail clippers. Do not hesitate to comment on style and fit of shoes or to refer to a podiatrist.

- **Rectal**--Assess for diseases of the prostate, fecal impaction, integrity of sacral reflexes in persons with impotence, spinal stenosis or posterior column findings, hemoccult.
- **Pelvic examination**--Assess for pelvic prolapse, uterine, adnexal or vaginal neoplasm, infections, estrogen deficit. The lithotomy position may produce discomfort in the osteoarthritic patient. An alternative is the left lateral decubitus position with the right hip flexed more than the left. Pap smears should be done in elderly women, but the recommended frequency is debated. Speculum examination may be painful and difficult due to atrophic changes and vaginal stenosis. A pediatric speculum is often necessary and, occasionally, the examination is so difficult that gynecologic consultation is indicated.
- **Neurological**
 - a. Mental status examination should be performed in all patients to establish a baseline in the event of future dysfunction. This need not occur in the first session.
 - b. Deep tendon reflexes and vibratory sense may be decreased normally.
 - c. Deficits of language, coordination and other subtle focal findings may indicate cerebrovascular disease that is responsible for cognitive impairment or deficits in instrumental ADL's.
 - d. Extrapyrimal signs (muscle rigidity, tremor) may indicate either adverse effects of neuroleptic medication or Parkinson's disease. In most instances, intention tremor and some resting tremors are benign conditions. Unilateral tremors may indicate stroke. A resting tremor with a "pill-rolling" character is worrisome as is any tremor that impairs function.

When physicians have a high index of suspicion with knowledge of the subtleties of physical assessment in the older adult, an adequate information base can guide timely intervention.

CLINICAL EXAMINATION IN GERIATRIC DISORDER

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The geriatric assessment is a multidimensional, multidisciplinary assessment designed to evaluate an older person's functional ability, physical health, cognition and mental health, and socioenvironmental circumstances. It is usually initiated when the physician identifies a potential problem. Specific elements of physical health that are evaluated include nutrition, vision, hearing, faecal and urinary continence, and balance. The geriatric assessment aids in the diagnosis of medical conditions; development of treatment and follow-up plans; coordination of management of care; and evaluation of long-term care needs and optimal placement. The geriatric assessment differs from a standard medical evaluation by including nonmedical domains; by emphasizing functional capacity and quality of life; and, often, by incorporating a multidisciplinary team. It usually yields a completer and more relevant list of medical problems, functional problems, and psychosocial issues. Well-validated tools and survey instruments for evaluating activities of daily living, hearing, faecal and urinary continence, balance, and cognition are an important part of the geriatric assessment. Because of the demands of a busy clinical practice, most geriatric assessments tend to be less comprehensive and more problem-directed. When multiple concerns are presented, the use of a “rolling” assessment over several visits should be considered.

Approximately one-half of the ambulatory primary care for adults older than 65 years is provided by family physicians,¹ and approximately 22 percent of visits to family physicians are from older adults. It is estimated that older adults will comprise at least 30 percent of patients in typical family medicine outpatient practices, 60 percent in hospital practices, and 95 percent in nursing home and home care practices.

A complete assessment is usually initiated when the physician detects a potential problem such as confusion, falls, immobility, or incontinence. However, older persons often do not present in a typical manner, and atypical responses to illness are common. A patient presenting with confusion may not have a neurologic

problem, but rather an infection. Social and psychological factors may also mask classic disease presentations. For example, although 30 percent of adults older than 85 years have dementia, many physicians miss the diagnosis. Thus, a more structured approach to assessment can be helpful.

The geriatric assessment differs from a typical medical evaluation by including nonmedical domains; by emphasizing functional capacity and quality of life; and, often, by incorporating a multidisciplinary team including a physician, nutritionist, social worker, and physical and occupational therapists. This type of assessment often yields a completer and more relevant list of medical problems, functional problems, and psychosocial issues.

Because of the demands of a busy clinical practice, most geriatric assessments tend to be less comprehensive and more problem-directed. For older patients with many concerns, the use of a “rolling” assessment over several visits should be considered. The rolling assessment targets at least one domain for screening during each office visit. Patient-driven assessment instruments are also popular. Having patient complete questionnaires and perform specific tasks not only saves time, but also provides useful insight into their motivation and cognitive ability.

Functional Ability

Functional status refers to a person's ability to perform tasks that are required for living. The geriatric assessment begins with a review of the two key divisions of functional ability: activities of daily living (ADL) and instrumental activities of daily living (IADL). Physicians can acquire useful functional information by simply observing older patients as they complete simple tasks, such as unbuttoning and buttoning a shirt, picking up a pen and writing a sentence, taking off and putting on shoes, and climbing up and down.

Physical Health

The geriatric assessment incorporates all facets of a conventional medical history, including main problem, current illness, past and current medical problems, family and social history, demographic data, and a review of systems. The approach to the history and physical examination, however, should be specific to older persons. In particular, topics such as nutrition, vision, hearing, faecal and urinary continence, balance and fall prevention, osteoporosis, and polypharmacy should be included in the evaluation.

SCREENING FOR DISEASE

In the normal aging process, there is often a decline in physiologic function that is usually not disease-related. However, treatment of diabetes mellitus, hypertension, and glaucoma can prevent significant future morbidity. Screening for malignancies may allow for early detection, and some are curable if treated early. It is important that physicians weigh the potential harms of screening before screening older patients

NUTRITION

A nutritional assessment is important because inadequate micronutrient intake is common in older persons. Several age-related medical conditions may predispose patients to vitamin and mineral deficiencies. Studies have shown that vitamins A, C, D, and B₁₂; calcium; iron; zinc; and other trace minerals are often deficient in the older population, even in the absence of conditions such as pernicious anaemia or malabsorption. There are four components specific to the geriatric nutritional assessment: (1) nutritional history performed with a nutritional health checklist; (2) a record of a patient's usual food intake based on 24-hour dietary recall; (3) physical examination with particular attention to signs associated with inadequate nutrition or overconsumption; and (4) select laboratory tests, if applicable.

VISION

The most common causes of vision impairment in older persons include presbyopia, glaucoma, diabetic retinopathy, cataracts, and age-related macular degeneration.

HEARING

Audio scope examination, otoscopic examination, and the whispered voice test are also recommended. The whispered voice test is performed by standing approximately 3 ft behind the patient and whispering a series of letters and numbers after exhaling to assure a quiet whisper. Failure to repeat most of the letters and numbers indicates hearing impairment. Additionally, patients' medications should be examined for potentially ototoxic drugs. Patients with chronic otitis media or sudden hearing loss, or who fail any screening tests should be referred to an otolaryngologist. Hearing aids are the treatment of choice for older persons with hearing impairment, because they minimize hearing loss and improve daily functioning.

URINARY CONTINENCE

Urinary incontinence has important medical repercussions and is associated with decubitus ulcers, sepsis, renal failure, urinary tract infections, and increased mortality. Psychosocial implications of incontinence include loss of self-esteem, restriction of social and sexual activities, and depression. Additionally, incontinence is often a key deciding factor for nursing home placement.

BALANCE AND FALL PREVENTION

Impaired balance in older persons often manifests as falls and fall-related injuries. Approximately one-third of community-living older persons fall at least once per year, with many falling multiple times. Falls are the leading cause of hospitalization and injury-related death in persons 75 years and older.

The Tinetti Balance and Gait Evaluation is a useful tool to assess a patient's fall risk. This test involves observing as a patient gets up from a chair without using his or her arms, walks 10 ft, turns around, walks back, and returns to a seated position. This entire process should take less than 16 seconds. Those patients who have difficulty performing this test have an increased risk of falling and need further evaluation.

OSTEOPOROSIS

Osteoporosis may result in low-impact or spontaneous fragility fractures, which can lead to a fall. Osteoporosis can be diagnosed clinically or radiographically. It is most commonly diagnosed by dual-energy x-ray absorptiometry of the total hip, femoral neck, or lumbar spine, with a T-score of -2.5 or below. The USPSTF has advised routinely screening women 65 years and older for osteoporosis with dual-energy x-ray absorptiometry of the femoral neck.

A CONCEPT OF ANIDRA (INSOMNIA) AS A JARA VYADHI

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ABSTRACT

Insomnia, regarded as the anidra in the Ayurveda classics in the sleep disorder in which patient do not able to take proper sleep. Lack of regular sleep of minimum hours that is necessary for the mental and physical health is called as the insomnia (anidra). It leads to the various mental problems like confusion, psychosomatic disorders, weakness, difficulty in concentration etc. Ayurveda defined nidra as the one of the three upastambha for the healthy individual. It is believed that due to the increase Vata in the jara avastha and the tama Guna dominance insomnia is very common.

Insomnia is one of the most common problem in adults also but insomnia in jara avastha is seen very easily and it need proper treatment along with aahar and vihara to get corrected. As Ayurveda states that there is natural dominance of Vata dosha in jara avastha so it leads to insomnia which is considered under the Vata nanatmaja vikara.

INTRODUCTION

Insomnia is the sleep disorder that makes the people to sleep properly and it leads to various changes in the body. In ancient science the basic approach to the concept of health was basically psychosomatic in nature which was related to the state of equilibrium of physiological and biochemical factors like *Dosha, Agni, Dhatu, Mala* and a state of wellbeing of mental and spiritual forces. *Rajas* and *Tamas* are the important factors affecting mind and *Vata, pitta* and *Kapha* are the doshika factors affecting the body. The *Manas Roga Vijayan* is a branch of *Ayurveda* which deals with *manas*, its disease and treatment. *Kama* (desire), *Krodha* (anger), *moh* (delusion), *Bhaya* (fear), *Shoka* (grief), *chinta* (worry), *Irsha* (envy), *vilap* (groaning), *lobh* (greed) etc. are the *Mansika Bhavas* which leads to imbalance of mind and intellect.

These mansika bhava gets affected due to the increase of the Vata dosha and the tama Guna which leads to the disturbance in the sound sleep pattern and weakness after waking up and leads to the changes in the nature of the individual.

MATERIALS AND METHODS

Mana which is known as mind is well described in ayurveda. In sroto vimaniya Adhyaya in vimansthana, Charakacharya has mentioned 13 srotas and their respective mulasthana except manovaha srotas. But in Charaka Sharirsthana 1/20, Charaka Indriyasthan 5/41 and Charaka Chikitsasthan 9/5 manovaha srotas has been mentioned clearly. With context to Chakrapani tika on above references it is said that Hridaya and Dasha Dhamani is the site of Mana.

Here disorders of the mana vikara are mentioned and they need a proper psychiatry assesment for the correction with the history of the patients regarding the present behaviour causes and of the past also. The insomnia is anidra in the Ayurveda and is comes under the nanatmaja vikara of vata dosha and also it comes in the tamoshleshmasamudbhava.

Individual can be also in the stress or anxiety due to any of the cause that also leads to the disturbance of sleep by the vitiation of the dosha and guna. Nidanparivarjana which is one of the most important treatment mentioned in the text need to be followed here.

Modern science also believes that due to the ageing it leads to the slowness of the abilities and the activities in the mind for the coordination and any stress leads to the release of the cortisol in the body and this leads to the various disturbed active phases with in the brain and leads to insomnia. Insomnia is also responsible for the hypertension and various cardiovascular disorders so it needs to be managed properly.

According to the Ayurveda treatment is mentioned in the text for the mansika Vyadhi as the satvaavjay and with the mansika chikitsa dosha chikitsa is also necessary.

SAMPRAPTI

Due to the Hetu Sevana the dosha gets vitiated within the body that are manas and the sharirika dosha and they use to take sthan into the hridaya which is mentioned as the moolsthana and they use to cause the dushti of the manovaha and causes the manas Vyadhi.

ETIOLOGICAL FACTORS

The Sattva, Rajas & Tamas are the Guna are the three Guna that are the mansika Guna in the individual and its imbalance in the body leads to the development of the factors that are the mansika vikara that are the Kama, Krodha, Bhaya, lobha etc. and this factors disturbs the behavior and leads to the sleep disturbances.

Out of three the predominance of the tama Guna is responsible for the mansika vikara and comes in the negative side of the heath it disbalances the sense organs and sleep also. For the correction of these and to keep in into control the pranayama and yoga's are mentioned in the Ayurveda to make them healthy and ultimately the body.

Also, as the part of the pathology and the history taking it is very important in such cases to assess the patient with proper history taking in which these things should be kept in mind:

- Complain
- History of the present illness
- Previous disorder history and treatment extent

In this context the complain of the patient to be noted and the history related to it complain to be taken along with the family history, sexual history, personal history in detail.

The history of the present illness is also very important for the factors that may have caused the illness with onset and the progression factors and also the causes any traumatic emotional cause that led to the development of the illness.

Any previous history is also important because that can be responsible for current one and all the incidence related to the close members also the asked in the details.

DISCUSSION

The insomnia is not the simple disease and it is very common now-a-days due to the lifestyle and in the jara avastha it is most predominantly seen and so its factors as per Ayurveda to be assessed and studies for the proper understanding and the management of the illness.

As the insomnia also leads to several problems because improper sleep leads to the various hemodynamic and other problems so that to be taken into consideration.

The Nidanaparivarjana chikitsa plays a very role in the management of this illness and along with this the lifestyle changes with yoga and Ayurveda is very helpful.

But for all these the causes of the insomnia in the individual to be assessed very properly with the proper history taking and the counselling and with the study as per Ayurved mansika bhava and Nidana.

CONCLUSION

Anidra (Insomnia) is one of the most common disease in the jara avastha due to the dominance of the Vata dosha physiologically as per classics and also due to the mental or emotional disturbances in old age and due to the both combined Nidana or factors it is very common and to proper management required the proper study of the Nidana and the counselling in the patients. And due to the factors similar in both science it can be said that the insomnia is also related to the mansika bhava and lies in the mansika vikara due to the disturbance of the tama Guna.

REFERENCES:

1. Acharya Vidyadhar Shukla and Prof. Ravidatta Tripathi, Editor, Charakasamhita of Agnivesha Edited with Vaidyamanorama Hindi Commentary, Volume 1, Sharirsthana; Katidhapurushiya-adhyaya, Chapter 1, verse 23, Chaukhmba Sanskrit Pratishtahan, Delhi, Reprint 2010
2. Acharya Vidyadhar Shukla and Prof. Ravidatta Tripathi, Editor, Charakasamhita of Agnivesha Edited with Vaidyamanorama Hindi Commentary, Volume 1, Sharirsthana; Sharirvichasharir- adhyaya, Chapter 6, verse 3, Chaukhmba Sanskrit Pratishtahan, Delhi, Reprint 2010
3. P.C. Dave, Editor of Vedantasara of Sadanand Yogindra saraswati, Chapter 13, Publisher Saraswati Pustak Bhandar, Ahamadabad, Edition 2011
4. Byadgi, P.S., *Ayurvedic Vikriti Vigyana and Roga Vigyana*, Volume II, Unmadaadhyaya: Chapter 56, New Delhi: 1st Edition, Chaukhambha Publications, 2009, 520-21.
5. Byadgi, P.S., *Ayurvedic Vikriti Vigyana and Roga Vigyana*, Volume II, Unmadaadhyaya: Chapter 56, New Delhi: 1st Edition, Chaukhambha Publications, 2009, 511-12.

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MANOVAHA SROTOVIKARA IN GERIATRICS

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Abstract

Ayurveda the science of life in general and especially the system of medicine flourishing day by day. Ayurveda believes in complete health which covers all the aspects of the health, physical, mental, spiritual and social. In Ayurveda 8 branches have which is specialised in its own way. Those are *Kayachikitsa*, *Balatantra*, *Grahachikitsa*, *Urdhvangachikitsa*, *Shalyachikitsa*, *Damshtarchikitsa*, *Jarachikitsa*, *VrushaChikitsa*. one among that is geriatrics. Mental health is most important factor to be checked in today's scenario. manas is entity by which we think about everything. Manas is atindriya (beyond sensory perception or other than indriyas), chetas and satvasangyaka. . *Manovaha sroto moola* is said to be *Hridaya* and *Dash dhamani*. Manovaha srotodusti Nidanas are not explained specifically but nidanas explained in unmada also affect the manavaha srotas. Manovaha sroto vyadhi also include diseases like *Bhutonmada*, *Atatvabhinivesha*, *Mada roga*, *Murcha roga*, *Sanyasa roga*, *Bhrama roga*, *anidra* and *Vishad*. Most common srotovikara observed in geriatrics patients are smritivibhramsh (Alzheimers disease), Depression etc. Examination of *manas rogas* are done very carefully and certain points to be kept in mind those are Criteria explained under unmada like *Manas*, *Budhhi*, *Sajna*, *Smriti*, *Bhakti*, *Sheela*, *Chesta*, *Achara*. Ashtavidha and dashvidha pariksha also to be done carefully to reach the final diagnosis.

Manovaha srotovikara in Geriatrics

Ayurveda the science of life in general and especially the system of medicine flourishing day by day. Ayurveda believes in complete health which covers all the aspects of the health, physical, mental, spiritual and social. In Ayurveda 8 branches have which is specialised in its own way. Those are *Kayachikitsa*, *Balatantra*, *Grahachikitsa*, *Urdhvangachikitsa*, *Shalyachikitsa*, *Damshtarchikitsa*, *Jarachikitsa*, *VrushaChikitsa*¹. One among that branch is Geriatrics, which deals with age related disorders. Mental health is most important factor to be checked in today's scenario. concept of manas has very well explained in Ayurveda. Manas word is derived from *man dhatu* and *asun pratyaya* , manas is entity by which we think about

everything². It is one and subtle in nature³. Manas is atindriya (beyond sensory perception or other than indriyas), chetas and satvasangyaka⁴. Acharya sushruta has explained manas as ubhayatmaka which means that which have quality of both the sense and motor organs⁵. Location of manas is said to be *hridaya*. Manas is also considered one of the vyadhi ashaya, Manas roga are said to be *kama, krodha, shoka, bhaya, harsha, vishad, irshya, abhyasuya, dainya, matsarya, lobha, moha, mana, chinta and udvega*⁶. Acharya charaka has explained that there is very close relationship between manas and body, involvement of both the body and mind is observed in so many diseases such as unmada, apasmara, klaibya, atisara, chhardi, arochaka etc.

Concept of manas is well explained in granthas but concept of manovaha srotas and its vikara is not explained separately or with srotas prakarana in the classical texts but it is explained under different sthanas, in charaka chikitsa it is explained in indriyasthanas 5th chapter as well as in Unmada and Apasmara. *Manovaha sroto moola* is said to be *Hridaya* and *Dash dhamani*. Manovaha srotodusti Nidanas are not explained specifically but nidanas explained in unmada also affect the manavaha srotas, those are Intake of Unwholesome, Polluted and uncleaned foods and drinks, Indulging in sinful acts by insulting Dev, Guru, Dwija., Excessive fear and exhilaration, Mano Abhighata, Vishama cheshta. Due to the consumption of these etiological factors saririka as well as manasika dosas become agitated and enter hridaya of the patient who is having inferior satva and blocks manovaha srotas and manifest unmada. Manovaha srotodusti vikaras are not mentioned specifically in classics but as manovaha srotas is involved in unmada so symptoms of unmada are taken as manovaha sroto vikara. Unmada is characterised by the perversion of mind, intellect, consciousness, knowledge, memory, desire, manners, behaviour and conduct. Manovaha sroto vyadhi also include diseases like *Bhutonmada, Atatvabhinivesha, Mada roga, Murcha roga, Sanyasa roga, Bhrama roga, anidra* and *Vishad*.

Most common srotovikara observed in geriatrics patients are smritivibhramsh (Alzheimer's disease) it is type of dementia which is characterised by loss of memory, impairment of intellectual functions, deterioration of personality with lack of personal care etc. Cause of dementia is said to be loss of nerve cells and their connections in the brain. Other one is depression which is common mental disorder affecting more than 264 million people worldwide. It is characterised by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities. The cause of depression includes complex interactions between social, psychological and biological factors. Life events such as childhood adversity, loss and unemployment contribute to and may catalyse the development of depression. Examination of *manas rogas* are done very carefully and certain points to be kept in mind those are environment of patient, heredity, personality make up in

case of *deha prakriti* and *manas prakriti*, examination *satva*, examination of underlying pathology. Criteria explained under unmada like *Manas*, *Budhhi*, *Sajna*, *Smriti*, *Bhakti*, *Sheela*, *Chesta*, *Achara*. Ashtavidha and dashvidha pariksha also to be done carefully by keeping in view about old age. With this routine blood and urine examinations can be done, EEG ,EMG,CT, MRI , depression scales etc can be done to find out the exact cause of the disease.

Rapid change in lifestyle and dietary factor have impacted the elderly people too which is cause for many diseases. So to prevent manovaha srotovikaras in elderly one must follow treatment principles like avoiding the etiological factors or triggering factors of diseases and with this karana pratyanka chikista msut be done which is treatment according to cause. Preventive measure to such as following sadvritta, achara rasayana, etc must be done earlier which could be essential step toward healthy mental state.

Reference

- 1)Bramhannand Tripathi, Astanga Hridaya Sutrasthana Chapter 1 Shloka number 5
- 2) Sanskrit Hindi shabdakosha page no.771
- 3) Bhagvan das Charaka samhita sharirasthana 1/19 Chaukhambha publication
- 4) Bhagvan das Charaka samhita sutrasthana 8th chapter 4th shloka Chaukhambha publication
- 5)Srikantha murthy Sushruta Samhita sharirasthana 1st chapter 16th shloka chaukhambha publication.
- 6) Srikantha murthy Sushruta Samhita sharirasthana 1st chapter 25th shloka chaukhambha publication.

CLINICAL EXAMINATION IN GERIATRIC DISORDER

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Skin - Initial observation includes color (normal rubor, pale, cyanotic). Examination includes a search for premalignant and malignant lesions, tissue ischemia, and pressure ulcers. In the elderly, the following should be considered:

1) Black splinter hemorrhages in the middle or distal third of the fingernail are more likely to be due to trauma than to bacteremia.

2) A thickened, yellow toe nail indicates onychomycosis & fungal infection.

Face -

- i. Eyebrows that drop below the superior orbital rim
- ii. Descent of the chin
- iii. Loss of the angle between the submandibular line and neck
- iv. Wrinkles
- v. Dry skin

Eyes -

- i. Loss of orbital fat
- ii. inversion of lower eyelid margins
- iii. eversion of lower eyelid margins
- iv. a white ring at the limbus.

Snellen chart :

A Snellen chart is an eye chart that can be used to measure visual acuity.

Ophthalmoscopy :

Ophthalmoscopy is done to check for cataracts, optic nerve or macular degeneration and evidence of glaucoma, hypertension or diabetes

Mouth :

The mouth is examined for bleeding or swollen gums, loose or broken teeth, fungal infections, and signs of cancer
(eg, leukoplakia, erythroplakia, ulceration)

Neck :

The neck is checked for flexibility. Resistance to passive flexion, extension, and lateral rotation may indicate a cervical spine disorder

Breasts

In men and women, the breasts should be examined annually for irregularities and nodules. For women, monthly self-examinations are also recommended & annual screening mammography, especially for women who have a family history of breast cancer

GI System

- The abdomen is palpated to check for weak abdominal muscles, which are common among elderly people and which may result in hernias.

- The anorectal area is examined externally for fissures, hemorrhoids, and other lesions. Sensation and the anal wink reflex are tested. A digital rectal examination (DRE) to detect a mass, stricture, tenderness or fecal impaction is done in men and women.

Male Reproductive system

BPH is very common in older men. The prostate gland is palpated for nodules, tenderness and consistency by DRE (digital rectal examination)

Female Reproductive System

Regular pelvic examinations with a Pap test every 2 to 3 yr until age 65. At age 65 testing can be stopped if results of the previous 2 consecutive tests were normal.

The ovaries should not be palpable 10 yr after menopause; palpable ovaries suggest cancer
