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HOMOEO SPIRIT

QUARTERLY BULLETIN
VOL : 4 (DECEMBER) YEAR 2025

THE OBJECTIVE OF THIS INSTITUTIONAL BULLETIN IS :

- To provide regular updates and propagate information about the accomplishments of all the faculty members and students.
- To share significant information regarding the exceptional services rendered by the corresponding departments.
- To keep everyone in this institution well informed and engaged with the objective to maintain motivation and raise morale.
- This bulletin is for internal circulation and for educative purpose only.

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EDITORIAL

It gives me immense pleasure to pen this editorial for the present issue of Homoeo Spirit, the quarterly medical bulletin of Jawaharlal Nehru Homoeopathic Medical College. This bulletin serves as a vibrant academic platform that reflects the intellectual growth, clinical commitment, and research orientation of our institution.

The Quarter of September, October & November 2025 marked a significant milestone in the academic calendar of our college and the Faculty of Homoeopathy with the successful completion of HOMOEOFEST 2025, a flagship event that truly embodied the spirit of homoeopathy. The fest witnessed enthusiastic participation from students, interns, postgraduates, faculty members, and delegates from across the State. Scientific sessions, academic competitions, and interactive activities created an atmosphere of learning blended with creativity and collaboration.

A major highlight of HOMOEOFEST 2025 was the National Seminar on Homoeopathy, delivered by the eminent scholar Dr. Didar Singh. His scholarly deliberation, enriched with clinical insights and contemporary relevance, provided valuable guidance to both budding and experienced homoeopaths. The seminar not only strengthened academic understanding but also inspired participants to practice homoeopathy with deeper scientific reasoning and ethical responsibility.

The success of these events stands as a testimony to the collective efforts of the organizing committee, faculty members, student volunteers, and the unwavering support of the university management. Such academic endeavours reaffirm our institution's commitment to excellence in homoeopathic education, research, and patient care.

As we move forward, Homoeo Spirit continues to encourage academic writing, clinical documentation, research updates, and innovative ideas among students and faculty. It is our sincere hope that this bulletin will motivate readers to engage in lifelong learning and contribute meaningfully to the advancement of homoeopathy.

Let us carry forward the momentum generated by HOMOEOFEST 2025 and the National Seminar, striving together to uphold the values of scientific inquiry, holistic healing, and professional integrity.

With best wishes for continued academic excellence.

Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches

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Abstract

Parasitic diseases remain a significant cause of morbidity and mortality worldwide, particularly in tropical and subtropical regions. From a pathological standpoint, parasites induce disease through direct tissue damage, immune-mediated injury, and chronic inflammatory responses. This review summarizes the major groups of medically important parasites—protozoa, helminths, and ectoparasites—with emphasis on their pathological features and diagnostic techniques. In addition to conventional microscopy and serology, recent advances such as molecular diagnostics, next-generation sequencing, and artificial intelligence–assisted imaging are discussed, highlighting their growing role in modern diagnostic parasitology.

Keywords: Parasitology, Pathology, Protozoa, Helminths, Molecular diagnostics, AI in parasitology

Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches

1. Introduction

Parasitic infections constitute a major public health problem, affecting billions of individuals globally. In pathology, the study of parasites focuses on morphological identification, host–parasite interactions, tissue responses, and laboratory diagnosis. Accurate and timely detection is essential for effective treatment and prevention of complications. While traditional diagnostic methods remain widely used, technological advancements have significantly improved sensitivity and specificity. This review provides an overview of parasitic infections of medical importance and their diagnostic approaches, with reference to recent research developments.

2. Protozoan Parasites

2.1 Pathogenesis

Protozoa are unicellular eukaryotic organisms capable of intracellular or extracellular parasitism. Important human pathogens include Plasmodium spp., Entamoeba histolytica, Giardia lamblia, Leishmania donovani, and Toxoplasma gondii.

Plasmodium species invade erythrocytes, resulting in hemolysis, microvascular obstruction, and systemic inflammatory responses. Entamoeba histolytica causes invasive intestinal disease characterized by flask-shaped ulcers and may spread to the liver. Giardia lamblia adheres to the intestinal epithelium, leading to malabsorption.

2.2 Diagnostic Methods

Microscopy of peripheral blood smears and stool samples remains the cornerstone of diagnosis. Giemsa-stained thick and thin blood smears are the gold standard for malaria. Antigen detection assays and serological tests are widely used as adjuncts. Molecular methods such as PCR and qPCR offer superior sensitivity, particularly in low-parasitemia or asymptomatic infections.

Figure 1. Diagnostic workflow and microscopic morphology of protozoan parasites.

Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches

3. Helminthic Parasites

3.1 Pathogenesis

Helminths are multicellular parasites classified into nematodes, cestodes, and trematodes. Disease manifestations arise due to mechanical obstruction, nutritional deprivation, and chronic inflammatory responses. Schistosoma eggs induce granulomatous inflammation and fibrosis, while larval forms of Taenia solium can lodge in the central nervous system, producing neurocysticercosis.

3.2 Diagnostic Methods

Diagnosis primarily involves identification of eggs or larvae in stool or urine samples using concentration techniques. The Kato–Katz method is widely used for quantitative assessment. Serological tests and imaging modalities such as CT and MRI are valuable in tissue-invasive infections.

Figure 2. Morphology of helminth eggs and stool-based diagnostic techniques. (Page 7)

4. Ectoparasites

4.1 Pathogenesis

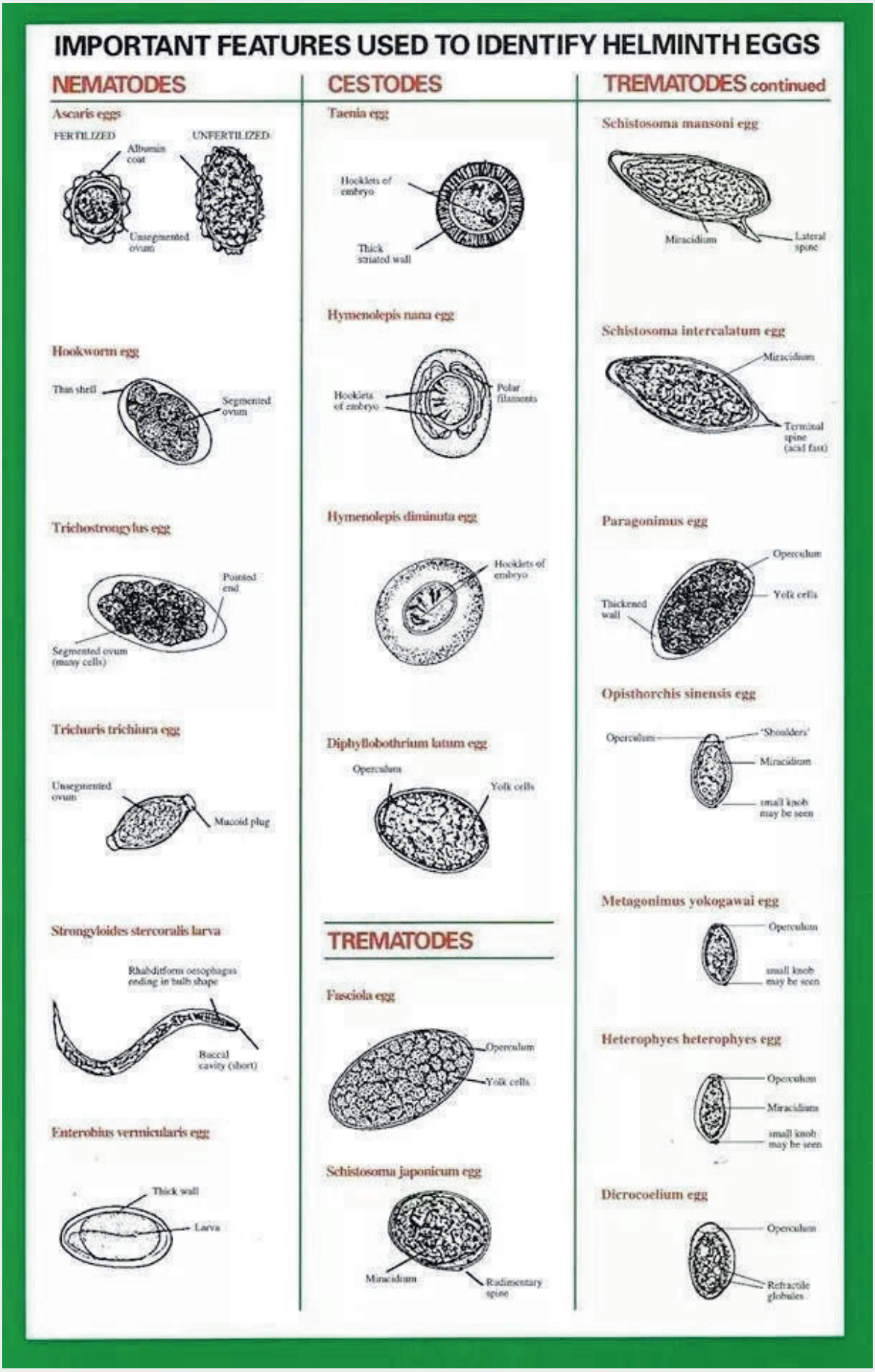
Ectoparasites such as lice and mites reside on the skin surface. Sarcoptes scabiei causes scabies through a delayed hypersensitivity reaction to mite antigens, resulting in intense pruritus and secondary bacterial infection.

4.2 Diagnostic Methods

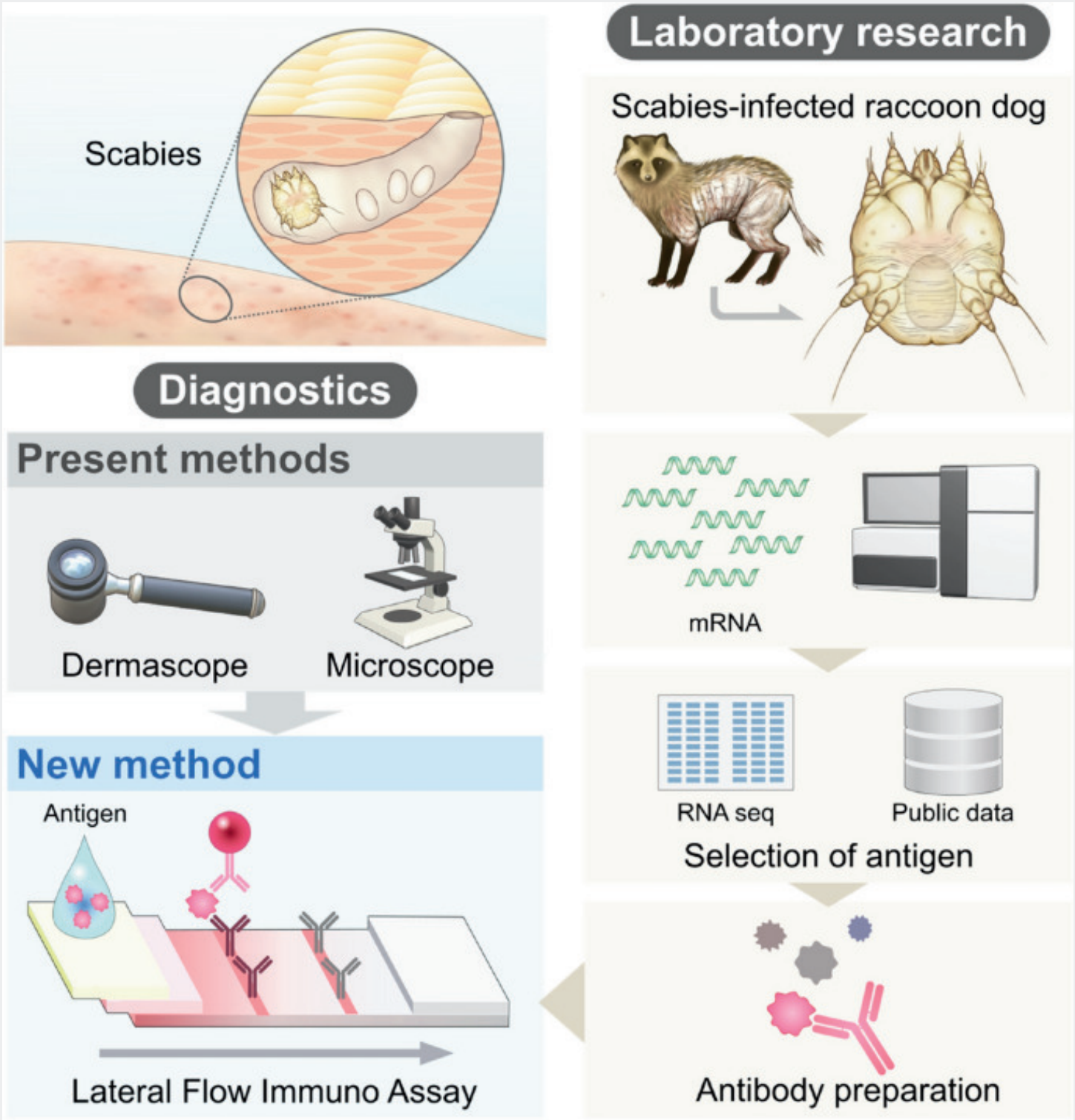
Diagnosis is largely clinical, supported by microscopic examination of skin scrapings to identify mites, eggs, or fecal pellets.

Figure 3. Diagnostic features and life cycle of common ectoparasites (Page 8)

Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches



Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches



Parasitic Infections : Classification, Pathogenesis, and Contemporary Diagnostic Approaches

5. Advances in Diagnostic Parasitology

Recent years have seen rapid development of molecular diagnostics, including PCR, multiplex PCR, and loop-mediated isothermal amplification (LAMP). Next-generation sequencing has enabled comprehensive analysis of parasite genomes and epidemiology. Additionally, artificial intelligence–based image analysis systems have demonstrated high accuracy in detecting malaria parasites and helminth eggs, offering promise for automated diagnostics in resource-limited settings.

6. Summary of Parasites and Diagnostic Techniques

Parasite Group	**Common Examples**	**Conventional Methods**	**Advanced Methods**
Protozoa	*Plasmodium, Entamoeba*	Microscopy, RDTs	PCR, qPCR, s AI-based imaging
Helminths	*Ascaris, Schistosoma*	Stool exam, Kato–Katz	Serology, Imaging, NGS
Ectoparasites	Lice, mites	Clinical exam	Digital microscopy

7. Conclusion

Parasitic infections produce a wide spectrum of pathological changes depending on parasite biology and host immune responses. While conventional diagnostic techniques remain indispensable, the integration of molecular and AI-assisted methods represents a major advancement in diagnostic parasitology. Continued research and implementation of these technologies are essential for improved disease detection, control, and prevention.

Abdominal Examination Explained

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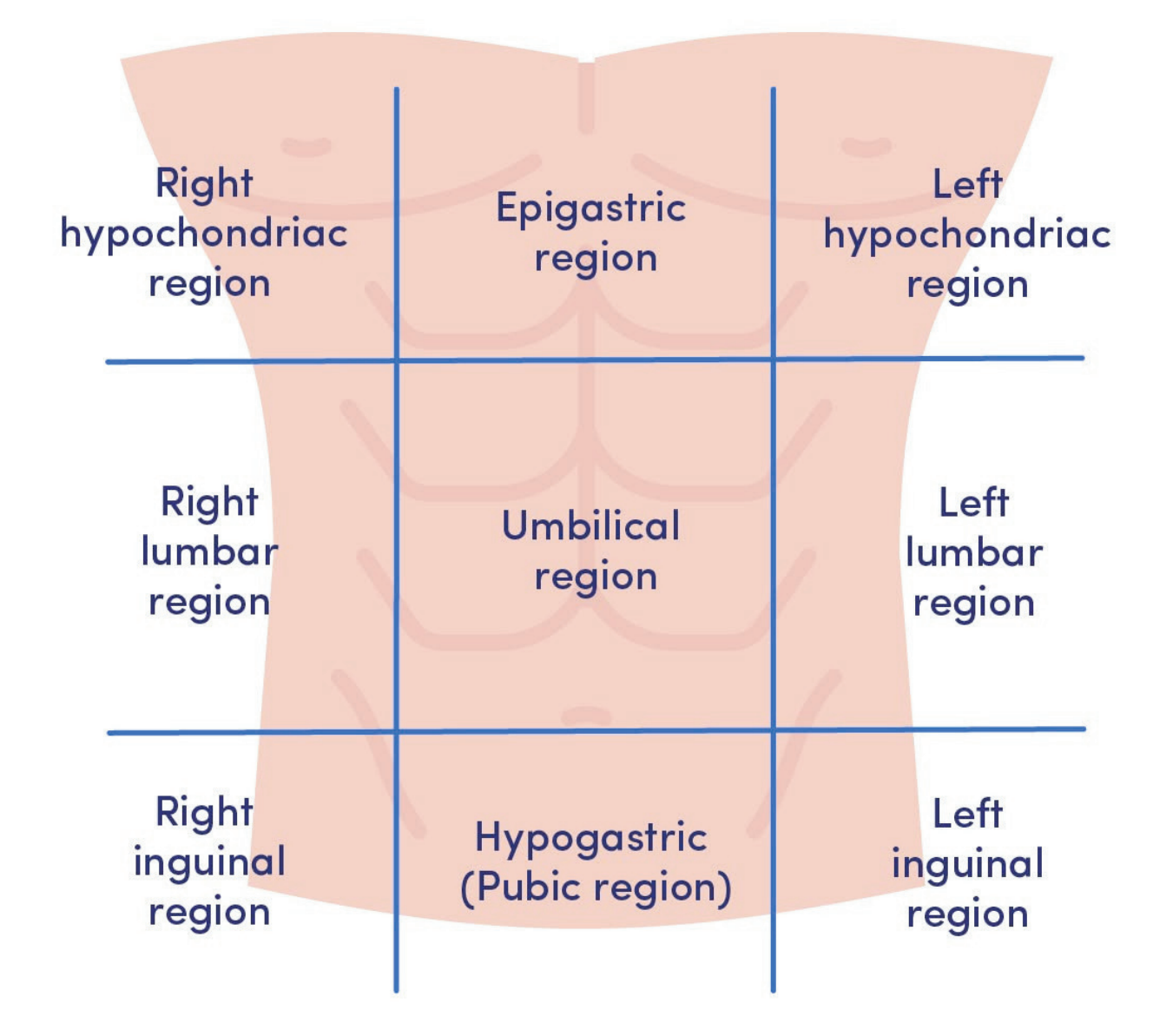
Abstract
Abdominal examination is a fundamental component of clinical assessment in medicine. A systematic and methodical approach allows clinicians to identify signs of gastrointestinal, hepatobiliary, renal, vascular, and systemic diseases. This article reviews the principles, techniques, and clinical significance of abdominal examination, integrating inspection, palpation, percussion, and auscultation. Common clinical signs, examination findings, illustrative diagrams, summary tables, and evidence-based references are presented to support undergraduate and postgraduate medical education.
Keywords: Abdominal examination, clinical methods, inspection, palpation, percussion, auscultation.

Introduction
Abdominal examination remains a cornerstone of bedside clinical medicine despite advances in imaging and laboratory diagnostics. A well-performed examination can guide differential diagnosis, reduce unnecessary investigations, and establish clinician–patient rapport. Classical teachings emphasize a structured sequence to ensure completeness and reproducibility. This article aims to provide a comprehensive overview of abdominal examination with diagrams, tables, and references suitable for academic and clinical use.

Abdominal Examination Explained

Anatomy and Surface Landmarks of the Abdomen
The abdomen is divided into regions and quadrants to localize pain, masses, and organ enlargement.

Regions of the Abdomen



Four Quadrant Division

- Right Upper Quadrant (RUQ)
- Left Upper Quadrant (LUQ)
- Right Lower Quadrant (RLQ)
- Left Lower Quadrant (LLQ)

These divisions assist in correlating symptoms with underlying organs.

Abdominal Examination Explained

Preparation for Abdominal Examination

- Ensure patient privacy and comfort
- Adequate lighting and warm hands
- Patient in supine position with knees slightly flexed
- Explain the procedure to reduce anxiety
- Examine from the right side of the patient

Steps of Abdominal Examination

1. Inspection

Inspection begins immediately on exposure of the abdomen.

Points to Observe:

- Contour: flat, scaphoid, distended
- Skin: scars, striae, pigmentation, dilated veins
- Umbilicus: position, eversion, discharge
- Visible peristalsis or pulsations

Clinical Significance:Visible peristalsis may suggest intestinal obstruction, while dilated veins may indicate portal hypertension.

2. Palpation

Palpation assesses tenderness, masses, and organ enlargement.

Superficial Palpation

- Detects tenderness, guarding, rigidity

Deep Palpation

- Assesses organs and deep masses

Organ Palpation Techniques:

- Liver: Bimanual palpation and hooking method
- Spleen: Starting from right iliac fossa moving diagonally
- Kidneys: Ballotment technique

[Diagram: Bimanual palpation of liver]

Hand placed below right costal margin while patient inspires deeply

Abdominal Examination Explained

3. Percussion
Percussion differentiates solid from hollow structures.
Key Areas:

- Liver span measurement
- Spleen dullness
- Ascites (shifting dullness, fluid thrill)

4. Auscultation
Auscultation is performed before palpation in some traditions to avoid altering bowel sounds.
Listen for:

- Bowel sounds: normal, hyperactive, absent
- Bruits: renal, aortic, iliac

Special Tests in Abdominal Examination

Test	Purpose	Clinical Significance
Murphy's sign	Gallbladder inflammation	Acute cholecystitis
Rovsing's sign	Appendiceal irritation	Acute appendicitis
Psoas sign	Retrocecal appendix	Appendicitis
Obturator sign	Pelvic appendix	Appendicitis
Fluid thrill	Ascites	Liver disease, malignancy

Abdominal Examination Explained

Common Abdominal Examination Findings

Finding	Possible Cause
Hepatomegaly	Hepatitis, heart failure
Splenomegaly	Portal hypertension, hematological disorders
Ascites	Cirrhosis, malignancy
Abdominal mass	Tumor, organ enlargement
Guarding/rigidity	Peritonitis

Clinical Importance and Limitations

While abdominal examination provides critical diagnostic clues, its accuracy depends on examiner skill and patient factors such as obesity and pain. Examination findings should always be correlated with history and supported by appropriate investigations.

Discussion

Modern medicine increasingly relies on imaging; however, abdominal examination remains indispensable. Teaching structured examination improves diagnostic reasoning and patient-centered care. Integrating classical signs with modern diagnostics enhances overall clinical accuracy.

Conclusion

Abdominal examination is an essential clinical skill that combines observation, touch, and listening to assess abdominal pathology. Mastery of this examination improves diagnostic efficiency and patient outcomes. Continuous practice and correlation with investigations are vital for maintaining clinical competence.

Abdominal Examination Explained

References (Vancouver Style)

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3. Macleod J. Macleod's Clinical Examination. 14th ed. Edinburgh: Elsevier; 2018.
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GALLERY

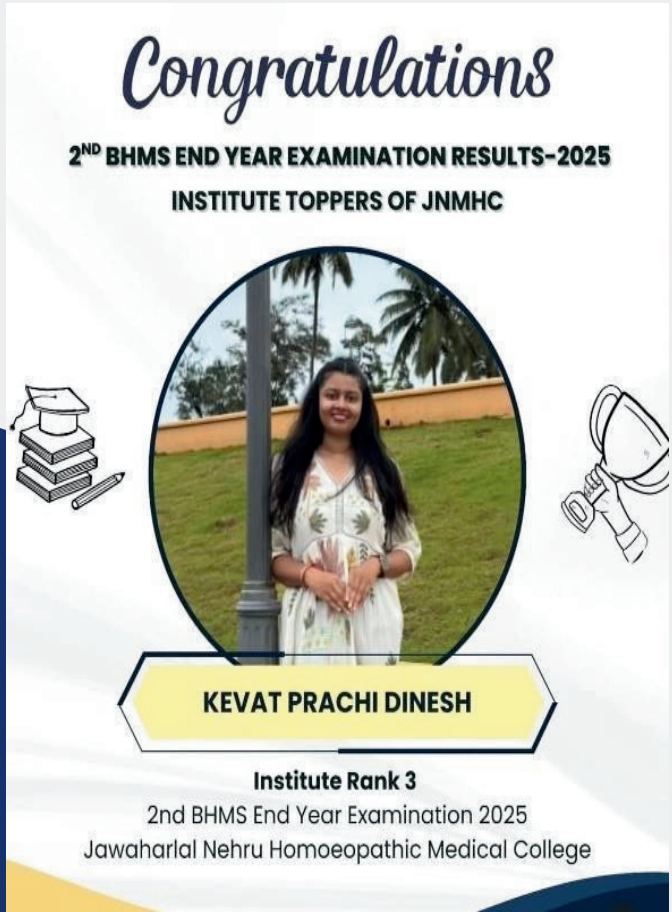
Date: 3 September, 2025

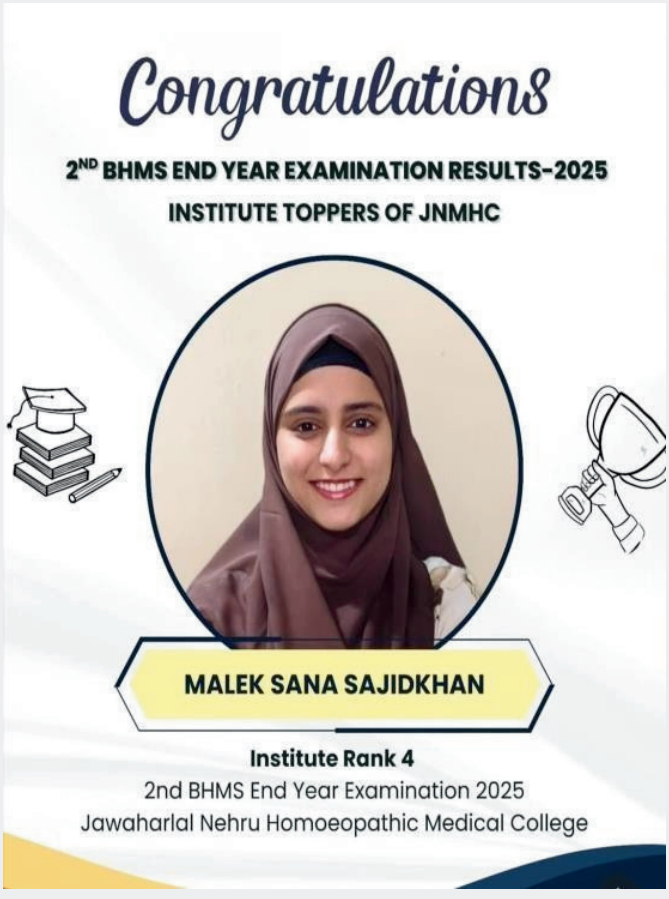
In remembrance of Dr.J.K. Patel on his 5th death anniversary, a meaningful Health awareness drive was organised under the guidance of the Department of community medicine, Jawaharlal Nehru Homoeopathic college and under the banner of Unnat Bharat Abhiyan at Karmaliyapura Primary School.

GALLERY

Date: 6th September,2025.

Academic excellence unlocked! Congratulations to the brilliant minds of Jawaharlal Nehru Homoeopathic Medical College who secured a rank amongst the University Top 10 students in 2th BHMS End Year Examination.





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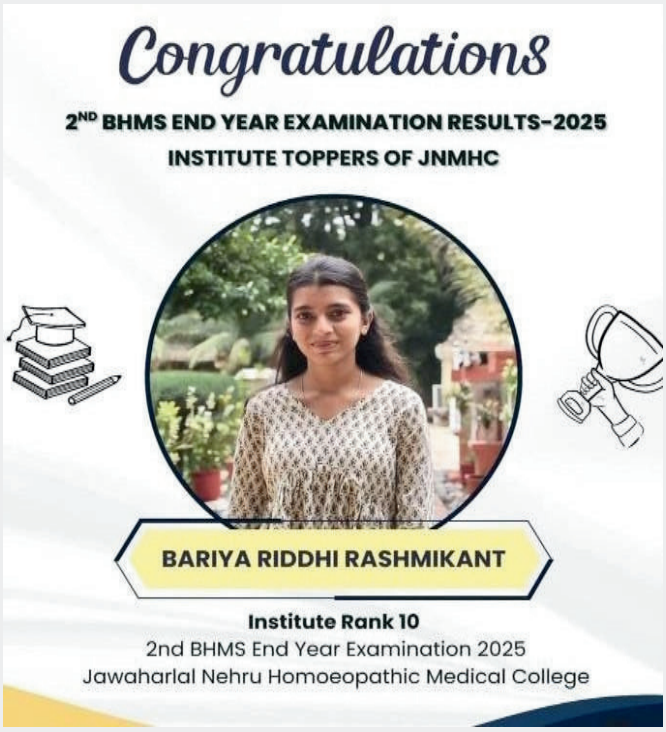
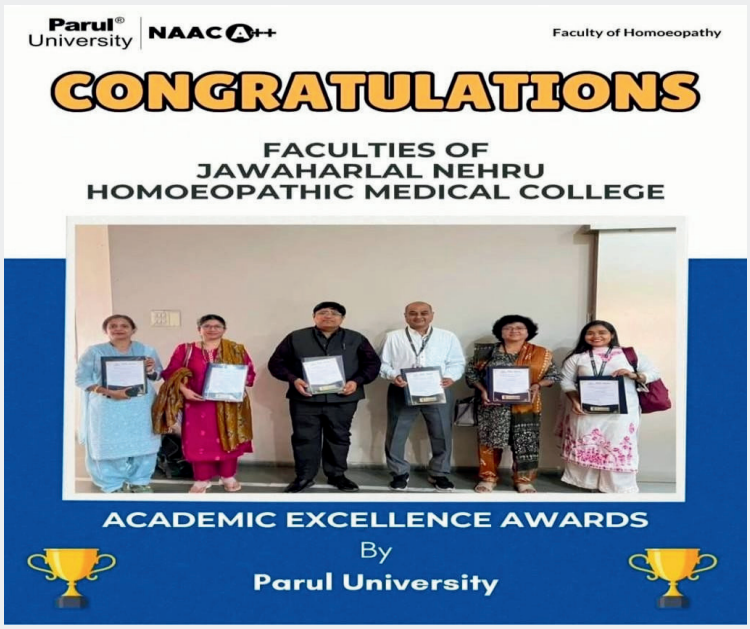


GALLERY

Date: 11 September,2025

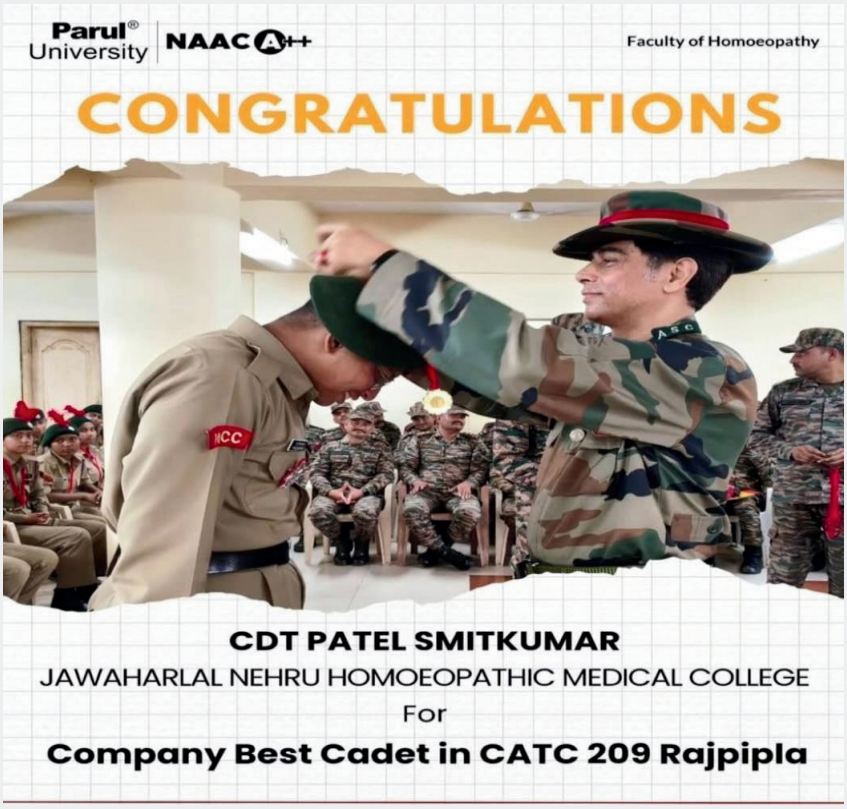
Heartiest congratulations to our esteemed faculties of Jawaharlal Nehru Homoeopathic medical College honoured with the Acedemic Excellence Award by Parul University.



GALLERY

Date: 15 September,2025

Our talented student of Jawaharlal Nehru Homoeopathic Medical College have made us proud by outstanding achievement in best PC Parade Commander CATC 209 Rajpipla.



GALLERY

Date: 5 September,2025

On the Occasion of Teacher's Day, our students stepped into the shoes of their mentors and delivered lectures as a faculty for a day. A unique celebration that reflected respect, gratitude and true spirit of teaching and learning.

GALLERY

Date: 22 September,2025.
Our talented student of Jawaharlal Nehru Homoeopathic Medical College have made us proud by outstanding achievement in Reels Competition and Nukkad Natak competition at the NABH patient safety conference 2025, New Delhi

GALLERY

Date: 29 September,2025.

JNHMC organised an insightful session on stress management delivered by Dr. Sudhir Joshi. The Seminar guided students on techniques to handle stress effectively, balance mental well-being and maintain a healthy life style.

GALLERY

Date: 2 October,2025

Our 3rd Year BHMS students visited PHC Goraj, organized by the Department of Community Medicine, JNHMC. The visit provided practical exposure to primary healthcare services, preventive medicine, and community health practices-bridging classroom learning with real-world application.

GALLERY

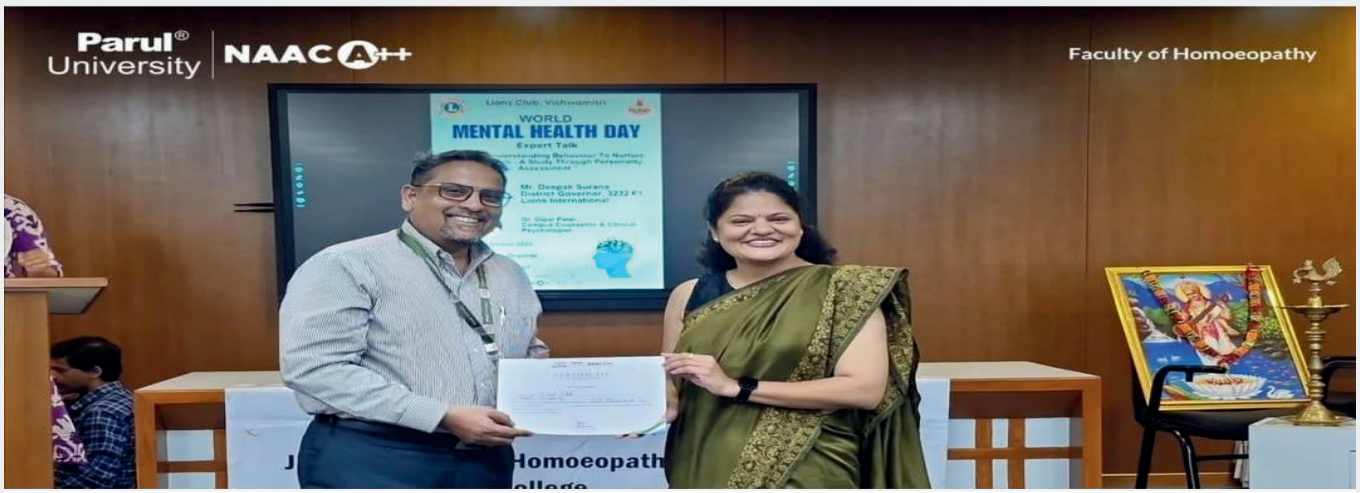
Date: 4 October,2025.

Jawaharlal Nehru Homoeopathic Medical College has started a new Peripheral OPD at Karmaliyapura, a village adopted under Unnat Bharat Abhiyan, bringing quality homoeopathic care closer to the community.

GALLERY

Date: 13 October,2025.

On the occasion of World Mental Health Day Celebration, a day dedicated to awareness, empathy, and understanding organized by Jawaharlal Nehru Homoeopathic Medical College, Parul University in association with Lions Club. An insightful expert talk was delivered by Dr. Dipal Patel Ma'am, and we were honoured by the presence of Mr. Deepak Surana, District Governor, 3232 F1 Lions International as our Chief Guest.



GALLERY

Date: 22 November, 2025.
An insightful faculty Development Workshop led by Prof. (Dr.) Abhijit Chattopadhyay at the Jawaharlal Nehru Homoeopathic Medical College

GALLERY

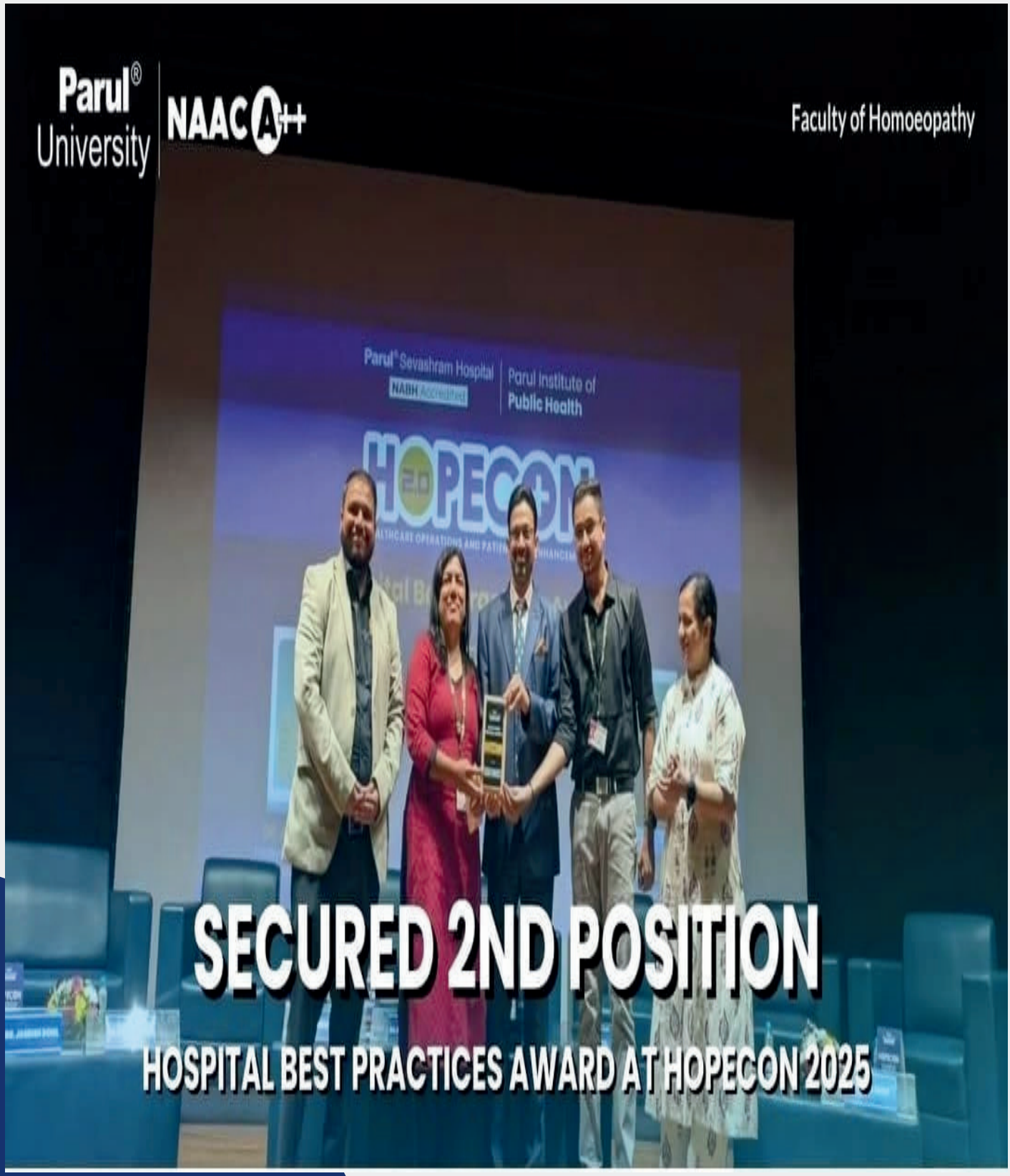
Date: 28th November,2025.

A vibrant beginning and Grand inauguration to our much-awaited HOMOEOFEST 2025, filled with inspiring words, enthusiastic participation, and unforgettable moments that set the tone for an extraordinary celebration ahead.

GALLERY

Date: 4 December,2025.

Jawaharlal Nehru Homoeopathic Medical College and Hospital secured 2nd position in the Hospital Best Practices Award at HOPECON 2025, organised by Parul Sevashram Hospital & Parul Institute of Public Health.



MEDICAL CAMP

Date: 4 December,2025.

Jawaharlal Nehru Homoeopathic Medical College and Hospital secured 2nd position in the Hospital Best Practices Award at HOPECON 2025, organised by Parul Sevashram Hospital & Parul Institute of Public Health.

Month	No. of camps	Total Beneficiaries
September-25	8	680
October-25	3	274
November-25	4	376

HOSPITAL DATA

JNHMCOPD					
Month	Medicine OPD	Pediatrics OPD	Ob/G OPD	Surgery OPD	Peripheral OPD
Sept.-25	2868	955	1098	1200	2621
Oct.-25	1925	661	793	839	2666
Nov.-25	2679	933	1018	1093	3413

JNHMCH IPD				
Month	Medicine IPD	Pediatrics IPD	Ob/G IPD	Surgery IPD
Sept.-25	903	96	230	220
Oct.-25	659	72	159	160
Nov.-25	1008	83	204	203

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