

MD-Pathology

Program Outcomes

To become a high quality consultant in pathology and to effectively and efficiently organize and supervise a modern well-equipped diagnostic laboratory:

- ❖ Diagnose routine and complex clinical problems on the basis of Histopathology (Surgical Pathology) and Cytopathology specimens, Blood and Bone Marrow examination and various tests under the domain of Laboratory Medicine (Clinical Pathology, Clinical Biochemistry/Chemical Pathology) as well as Blood Banking (Transfusion Medicine). Advice on the nature of appropriate specimens and the tests necessary to arrive at a diagnosis in a difficult or problematic case.
- ❖ Interpret clinical and laboratory data with reasonable accuracy able to correlate clinical and pathology data so that various clinical signs, symptoms and manifestations of disease can be correlated and explained.
- ❖ Should be able to teach Pathology to undergraduates, postgraduates, nurses and paramedical staff including laboratory personnel. Subject himself/herself to continuing education and constantly update his/her knowledge of recent advances in Pathology and allied subjects.

Course Outcomes

At the end of the course the students should be able to:

- ❖ At the end of the course the course the students should have the competence to diagnose important pathological conditions in various fields like histopathology, cytopathology, haematology & Immunopathology.
- ❖ Have acquired skills in effectively interpreting all laboratory reports. CO 3. Develops skills as a self-directed learner, recognize continuing educational need, use appropriate learning resources, and critically analyze published literature in order to practice evidence- based pathology.
- ❖ Demonstrates competence in basic concepts of research and epidemiology.
- ❖ Can organize and supervise the desired managerial and leadership skills.

- ❖ Carry out research. Able to systematically write a paper and publish in a journal. Able to present a paper in a conference through an oral presentation and poster presentation.
- ❖ Maintain accurate records of tests and their results for reasonable periods of time so that these may be retrieved as and when necessary. Make and record observations systematically that is of use for archival purposes and for furthering the knowledge of Pathology.
- ❖ Should be familiar with the function, handling and routine care of equipment in the laboratory. Should be able to identify problems in the laboratory and offer solutions there of so that a high order of quality control is maintained. Able to supervise and work with subordinates and colleagues in a laboratory.
- ❖ Should be capable of effectively disposing laboratory waste to ensure minimization of risk to infection and accidents to laboratory personnel.
- ❖ Should be able to perform most of the routine tests in a Pathology Laboratory including grossing of specimens, processing, cutting of paraffin sections making smears, making frozen sections and staining. Able to collect specimens by routinely performed non-invasive out-patient procedures such as venipuncture, finger-prick, fine needle aspiration biopsy of superficial lumps and bone-marrow aspirates. It is implied that the complications of these procedures and handling of complications are apparent. Further, whenever necessary must be able to provide appropriate help to colleagues performing an invasive procedure such as a biopsy or an imaging guided biopsy.

- ❖ To be able to correlate clinical and laboratory findings with pathology findings at autopsy, identify the causes of death due to diseases (apart from purely metabolic causes). Perform an autopsy, dissect various organ complexes and display the gross findings.
- ❖ Should be able to function as a part of a team that is essential for the diagnosis and management of a patient. He/she should therefore develop an attitude of cooperation with his/her colleagues so necessary for this purpose. It is implied that he/she will whenever necessary interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
- ❖ Always adopt ethical principles and maintain proper etiquette in his/her dealings with patients, relatives and other health personnel. Respect the rights of the patient including the right to information and second opinion. Should seek and give second opinion only where necessary.
- ❖ Provide leadership and inspire members of the team with whom he/she is involved with in the fields of diagnostic pathology, teaching and research. Develop communication skills not only to improve word power for reporting and professional opinions but also to interact with patients, relatives, peers and paramedical staff.