

BRANCH – VI M.Ch SURGICAL GASTRO-ENTEROLOGY

Scope of Training:-

Surgical Gastroenterology – This would involve:

- a. Diseases of gastrointestinal tract and allied organs with special reference to surgical disorders.
 - Gastrointestinal and allied organ trauma.
 - Gastrointestinal and allied organ oncology.
 - Clinical epidemiology relevant to Gastrointestinal practice.
 - Organ transplantation.
 - Stoma and Entero Cutaneous Fistula Management.
 - Nutrition – enteral and parenteral.
 - Adequate Knowledge about Pain and Palliative Care.

Relevant medical Gastroenterology knowledge.

Relevant radiology including interventional techniques, ultra sonography, nuclear medicine, CT, MRI and Angiography.

Basic sciences as applied to surgical Gastroenterology.

Diagnostic upper and lower Gastrointestinal Endoscopy including therapeutic procedures such as oesophageal varices injection, banding, dilatation and stenting of oesophageal strictures, polypectomy, etc. this should include knowledge about Endoscopic Ultra Sound

Surgical skills relevant to surgical Gastroenterological practice including minimally invasive surgery.

Intensive care, ventilatory care, monitoring of sick patients and knowledge about advanced life support

Maintenance of records and Database

Information retrieval, use of computers in medicine, Internet...

Surgical audit.

Clinical, applied and basic research including elements of biostatistics.

There should be extramural rotation, where necessary, to take care of geographical variations in disease pattern. There will also be scope for an elective training in some aspects of surgical Gastroenterology. For this one month posting in medical Gastroenterology and two months posting in other tertiary centers is necessary- in this one month can be spent in a centre doing Advance Minimal Access surgery, the next month can be spent in a centre doing regular transplant programme. The post graduates can be given the option of visiting any department overseas doing specialized work in surgical gastroenterology for a period of 4 weeks, if it is permissible.

Course Content:-

Knowledge:

Applied basic science knowledge relevant to the field of surgical Gastroenterology.

Diseases of the Gastrointestinal tract and allied organs such as liver, spleen, hepatobiliary tract, Pancreas, etc., with special reference to those of surgical importance.

Trauma to the Gastrointestinal tract and allied organs.

Recent advances applicable to the field of Gastroenterology.

Investigation of the Gastrointestinal tract – procedures, applications, interpretations.

Bio-statistics as applicable to clinical research. Principles of clinical epidemiology.

Skills:

Decision-making, clinical diagnosis, planning, interpretation and executing investigative procedures, management of Gastrointestinal and allied organ problems.

Diagnostic and therapeutic Endoscopy (only listed procedures).

Ability to perform simple and complex operative procedures on the Gastrointestinal tract and associated organs including minimally invasive surgery.

Monitoring of the sick patients.

Counseling patients and relatives regarding Gastrointestinal problems including Transplantation.

Ability to carry out research, scientifically review research and present research findings to an audience.

Ability to teach undergraduates and postgraduates in the field of surgical Gastroenterology.

Teaching / Learning Activities:

Ward / OPD patient management.

Peri operative Management

Assisting / performing operative procedures.

Long and short topic presentations.

Ward rounds, case presentations and discussions. Combined ward rounds with Medical Gastroenterologist.

Clinicoradiological and clinicopathological conferences.

Journal club.

Research review.

Problem solving sessions.

Tumour Board discussions with Radiation and Medical Oncologist.

Guest and in-house lectures. Conferences, seminars and CME's.

Participation in workshops, etc.

Teaching undergraduates / postgraduates / paramedical staff.

Surgical audit (patient care review meeting).

Biomedical equipments use and maintenance.

Structured Training Programme – Scheme:

- First year
- Outpatient / inpatient care.
 - Endoscopy.
 - Familiarization with use of computers in medicine and Learning Research Methodologies
 - Assisting Elective and Emergency surgeries.
 - Gastrointestinal Endoscopy – 4 weeks.
 - Anaesthesia / intensive care – Learning Advanced life support
 - System and skills in management of Ventilators - 4 weeks.
 - Starting research project.
- Second year
- Outpatient / inpatient care.
 - Peripheral rotations.

- Radiology: RT / Oncology – optional.
- Pathology, Nuclear Medicine.
- Independent operative procedure of average technical difficulty.
- Minimally invasive surgery – assisting and supervised work.

- Third year
- Outpatient / inpatient care.
 - Assisting and performing complex surgical procedures.
 - Finalization and submission of research projects.
 - Achieving competence in minimally invasive surgery and Endoscopic procedures.

Wherever considered necessary extramural rotation of 8 – 12 weeks must be encouraged at other recognized centers for a wider exposure to choices of therapy and other operative procedure particularly in view of differences in geographical incidence of disease.

Research Training:

The candidate will be trained in the ability to

- Frame a research question.
- Plan a study to answer the question.
- Collect the relevant information and
- Evaluate appropriately the collected data to draw a conclusion.

The candidate should become conversant with the reporting of these results as a research paper, in journals and as a presentation in conferences.

The activities would consist of:

Planning and organizing relevant animal / clinical studies to be submitted

as a dissertation at the end of the course.
Presentation of at least 3 papers in national / international conferences
and Attendance of at least one national conference per year.
Before completing the course the candidate should publish 2
Research papers and at least one of them should be in Indexed
Journal.

PATTERN OF EXAMINATION:

Theory PART-I

Duration 3 hours

Paper – I Basic Sciences as applied to Gastro-enterology 100
(Applied Anatomy, Applied Physiology,
Microbiology and Clinical Pharmacology).

This examination would be at the end of second year.

Theory PART-II

3 Papers 100 Marks Each in the Final year Duration 3 hours
each

Paper – II Surgical Gastro-enterology - General 100

Paper – III Surgical Gastro-enterology related to Hepato
Biliarys & Pancreatic diseases 100

Paper – IV Recent Advances in Surgical Gastro-enterology 100
and Proctology including Transplantation.

DISSERTATION	25 marks
LOG BOOK	25 marks (for certified Hand written Log Book)
CLINICAL EXAMINATION	400 marks
INTERNAL ASSESSMENT	50 marks (5 theory papers and practical examination at the end of 09, 15, 21, 27 and 33 Months – 5 x 10 = 50)
TOTAL MARKS	900

Practical and Oral Examination

	<u>No. OF CASES</u>	<u>DURATION</u>	<u>MARKS</u>
LONG CASE	One	One Hour	100
SHORT CASE	Two	One Hour (30 Mts Each)	100
WARD ROUNDS	Four (Minimum)	One Hour	100
		TOTAL	300
Oral/Viva Examination			100
		TOTAL	400

Note: Not more than three candidates will be examined in practical examination per day.

DISSERTATION: Approved/Not approved

MARKS QUALIFYING FOR A PASS

	Maximum Marks	Marks qualifying for pass (50%)
Theory	400	200
Clinical	300	150
Oral	100	50
Dissertation, Log Book and Internal Assessment (25+25+50 = 100)	100	50
	900	450