# **Curriculum DM Gastroenterology**



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## **Curriculum DM Gastroenterology**

The infrastructure and faculty of the department of gastroenterology will adhere for the following:

#### 1. Goals

The goal of DM course is to produce a competent Gastroenterologist who:

Recognize the health needs of patients & effective communication skills with patients and family

Has acquired the skills & recent advances pertaining to hepatology & gastroenterology

Has acquired skills in conducting research & educating medical/paramedical professionals

## 2. Objectives

At the end of the DM course in Gastroenterology, the student should be able to:

Practice the specialty of gastroenterology in keeping with the principles of professional ethics

Diagnostic/therapeutic/ rehabilitative/ preventive measures to provide holistic & advanced care to all patients

Record detailed history, full physical examination, investigate, diagnosis and treatment details

Demonstrate research methodology and facilitate learning to juniors/ medical/ nursing/paramedical students as a teacher-trainer

## 3. Syllabus

3.1 Theory: Cardinal manifestations, definition, epidemiology, etiopathogenesis, genetics, clinical presentation, complications, differential diagnosis, investigations, treatment and prevention and prognosis of all gastroenterological diseases.

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- 3.2. Practical: History- complaints past, present & treatment; examination and documentation of records
- 3.3: Procedures: Diagnostic and therapeutic Upper GI Endoscopy & Colonoscopy. Assist ERCP
- **3.4. Clinical Teaching:** Practical & clinical skills to evaluate and manage the various medical and gastrointestinal disorders with supervision by Consultants.

## 3.4: Gastroenterology Teaching - clinical

- OPD: A Resident should work up common cases and discuss with the consultant
- WARD: A Resident should gain competency in diagnostic case work up and day to day management of GI cases
- Investigations: X-ray abdomen, barium studies, CECT scan, MRI with MRCP of the abdomen
- Liver biopsy, upper GI Endoscopy, Sigmoidoscopy, Colonoscopy, therapeutic procedures
- Assist ERCP, breath test, motility (in future), fibroscan, Endoscopic ultrasound
- Per rectal examination, Nasogastric intubation, Ascitic tap

#### 3.5 Minimum procedures to be carried out by M.S.Ramaiah resident

Procedure Performance Criteria Number of Procedures

Esophago-gastroduodenoscopy (EGD): 1000

Colonoscopy: 500

Endoscopic retrograde Cholangiopancreatography (ERCP): Side viewing scopy: 20

Liver Biopsy: 20

Large volume paracentesis: 50

#### 4. Teaching Program

- 4.1 Acquisition of practical competencies and training skills being the keystone. Learning in postgraduate program is essentially self-directed emanating from clinical and academic work.
- **4.2 Teaching Sessions**: Journal club, seminars, bedside discussions, case presentations, clinical grand rounds, inter-departmental meetings- clinico-pathological/ surgical/ radiological meetings. Evidence based medicine and the use of guidelines for managing various diseases.
- 4.3 Teaching Schedule: Following is the suggested weekly teaching programme
- 1. Case Presentation & Discussion Once a week
- 2. Seminar Once in a week
- 3. Journal Club Once in a week

- 4. Grand Round Once a month
- 5. Statistical & Mortality Meet Once a month
- 6. Clinico-Pathological meet Once a month
- 7. Clinico-Radiological/surgical meet Once a month
- 8. Gut club once a month

## 4.4 Conferences and Papers

A resident must attend at least one conference per year.

Three papers per year must be presented in ISG and INASL conferences each

## 5. Schedule of Posting:

- 1. Gastroenterology Ward, OPD & emergencies 1st year
- 2. OPD- 2<sup>nd</sup> year
- 3. Endoscopy Lab 2<sup>nd</sup> and 3<sup>rd</sup> years
- 4. Log Book: Record by the candidate duly signed every month
- 5. Research Project: Three research projects per student with every project on completion to be presented at the conference/sent for publication
- 6. Thesis shall be submitted to the University within 2 years of joining the course.
- 7. Assessment of all the PG residents per month for their academic activities
- 7. Internal Assessment: Marks should be allotted out of 100-25 each as followed.
- Marks 1. Personal Attributes (behavior/responsibility) 2. Clinical Work (punctual/documents) 3. Academic activities (journal/seminar/case presentation) 4. Log book/researchwork
- 6. Job Responsibilities: Evaluation of patients, write the observations, discuss with consultant, investigate accordingly and formulate the treatment plan
- 1st and 2nd year residents: Outdoor Patient (OPD) & In- patient responsibilities: Each resident should be responsible and accountable for all the patients. Detailed work up of the case, case sheet maintenance, proper documentation of plan of care are utmost importance. Patient should be clearly explained of the nature of the illness, the treatment advice.. Sick patient responsibility: Emergencies- GI bleed, pancreatitis, cholangitis should be meticulously monitored, discussed with consultant and prioritize procedures. Discharge of the patient with proper summary and treatment details. Death: Anticipate serious condition of the patient, inform relatives beforehand, ICU and management plan to be discussed with consultant. To

. . consider autopsy/liver biopsy in death due to undiagnosed illness. Journal, clinicopathological meeting and endoscopic accessories by 1<sup>st</sup> year and seminars by 2<sup>nd</sup> year

3<sup>rd</sup> year residents: To monitor endoscopic procedures and become a teacher- trainer for juniors. Case monitoring during pre- procedures, mortality audit, case presentation and grand round case discussion. Clinisco surgical/radiological meetings.

### 7. Suggested Books and Journals

7.1 Textbooks 1. Gastrointestinal and Liver Disease- Sleisenger & Fordtran 2. Diseases of the Liver - Eugene R. Schiff 3. Diseases of the Liver & Biliary System- Sheila Sherlock 4. Yamada textbook of Gastroenterology-YAMADA 5. Sivag's textbook of GI Endoscopy- SIVAG 6. Gastro-intestinal Endoscopy- P. Cotton

7.2 Journals 1. Gastroenterology 2. Hepatology 3. GUT 4. Journal of Hepatology 5. American Journal of Gastroenterology 6. Gastrointestinal Endoscopy 7. Seminars in Liver disease. 8. Indian Journal of Gastroenterology 9. New England Journal of Medicine 10. Lancet 11. Tropical Gastroenterology 9.3 Clinics 1. Gastroenterology Clinics of North America 2. Clinics in Liver disease 3. Gastrointestinal Endoscopy Clinics of North America.

**8.Model Question Paper** -DM Gastroenterology- Maximum Marks: 100 & Time: 3 Hours. Attempt ALL questions. Answer each question and its parts in SEQUENTIAL ORDER. ALL questions carry equal marks. • Illustrate your answer with SUITABLE DIAGRAMS

Paper-I Basic Sciences as Related to Gastroenterology.

Paper-II Clinical Gastroenterology.

Paper-III Investigative Gastroenterology

Paper IV- recent advances