# THE Iraqi BOARD OF MEDICAL SPECIALITY

## **GASTROENTEROLOGY & HEPATOLOGY SPECIALITY**

## **DEFINITION OF THE SPECIALTY**

Gastroenterology is a medical specialty dealing with the diseases of the digestive system including the organs of the alimentary canal from mouth to anus and the hepatobiliary system, the pancreas and the peritoneum. Additional areas of focus include nutrition and nutritional deficiencies, digestive oncology, prevention and screening of disease, particularly colorectal cancer, and liver disease.

Gastroenterology includes growing number of advanced endoscopic techniques, both diagnostic and therapeutic.

### Vision

Developing, supporting, and encouraging doctors of the highest quality in the specialty of Gastroenterology and Hepatology

## **Purpose**

To achieve the delivery of high-quality patient care by promoting high standards for medical practice, thus clinical excellence.

## **TRAINING CENTRE**

- 1. Gastroenterology and hepatology teaching hospital / medical city
- 2. Baghdad center of gastroenterology and hepatology /Baghdad teaching hospital /medical city

## THE TRAINING CURRICULUM

## **Objective**

To graduate a specialist in Gastroenterology and Hepatology who has acquired sufficient knowledge, competence, skills, and behaviors to diagnose, treat and prevent diseases of the digestive system and related organs after a defined period of training based on a specific syllabus.

## **Duration of training**

The minimum training program should be of three years duration

## Requirements for the fellowship

Fellowship is eligible for doctor who has completed his/her postgraduate medical degree as fellowship in internal medicine from the Iraqi or Arab board of medical specialties

### **Core Curriculum**

The core curriculum defines the required knowledge, skills, and behaviors that a gastroenterologist should have acquired upon completion of his/her training period. To achieve these goals, the trainee should be exposed to a sufficient number and variety of patients and procedures throughout the entire training period.

## **Clinical training and Timetable**

## First year:

- 1. Two days outpatient management of patients with different gastrointestinal diseases supervised by supervisor
- 2. Daily in patient management with supervisor
- 3. One day of supervised diagnostic endoscopy include the following timetable
- A. First three months; observation of the gastroscopy and colonoscopy procedure
- B. The remaining months; doing supervised gastroscopy procedure
- C. Last three months; doing supervised colonoscopy

## **Second years:**

- 1. Two days/week of outpatient management with supervisor
- 2. Daily in patient management with supervisor
- 3. one day/week of supervised Diagnostic and therapeutic gastroscopy and colonoscopy
- 4. one day ERCP observation for the first 6 months/week
- 5. Last 6 months doing supervised Doudenoscopy during ERCP/week
- 6. One full day on call / week for doing emergency gastroscopy for upper GIT bleeding in the emergency department

## Third year

- 1. two days/week of outpatient management with the supervisor
- 2. one day/week of supervised diagnostic and therapeutic gastroscopy and colonoscopy
- 3. one day/week of Supervised ERCP procedure
- 4. one day/week of supervised diagnostic EUS
- 5. Supervised manometry and PH testing for upper and lower GIT diseases
- 6. supervised abdominal US /wee

# **Teaching Activities:**

The fellow should attend all the teaching activities during the training years

- 1. Clinical Case meeting/ week
- 2. Journal Club/week
- 3. Radiology meeting/week
- 4. Histopathology meeting/week
- 5. Endoscopy meeting/week

# **Fundamental Clinical Endoscopy Skills**

## **Upper GI Endoscopy**

- Diagnostic Endoscopy with biopsy and chromoendoscopy
- Therapeutic Endoscopy Haemostasis techniques (ligation, thermal haemostasis, injection techniques, clip deployment), dilatation of stenosis
- Stent insertion
- PEG insertion and retrieval

## **Lower GI Endoscopy**

- Diagnostic lower endoscopy with biopsy and chromoendoscopy
- Sigmoidoscopy
- Ileocolonoscopy
- Therapeutic Endoscopy
- Basic Polypectomy
- Haemostasis techniques (e.g., ligation, endoloop, thermal haemostasis, injection techniques, clip deployment)
- Dilatation of stenosis

## Research project:

The fellow should prepare a research in the second year under the supervision of one of the member of the scientific committee of gastroenterology and presents the results of his research in the third year of his training years and its prerequisite for the doing the final assessment examination at the end of the third year.

The research project should be approved by the scientific committee of the Iraqi board of internal medicine

### ASSESSMENT OF THE COMPETENCY OF TRINEE

#### Two examination need to be conducted

- 1. Theoretical primary examination at the end of the first year to test the knowledge of the trainee in all aspect of gastroenterology and hepatology diseases
- 2. Final examination at the end of the third year which include two parts, theoretical to test the knowledge of the trainee and clinical to test the skills and the professional behavior. Passing the theoretical examination is perquisite to do the clinical examination, The clinical examination include
- 1. Long case examination to test the knowledge and management sills
- 2. Short case examination to test examination skills
- 3. Histopathology and radiology examination

### **FUNDAMENTAL COMPETENCIES**

Knowledge of: Patient Interaction and Consultation-related Competencies

- Establishing rapport and putting the patient at ease
- Eliciting an appropriate history
- Performing a physical examination
- Making an initial diagnosis or differential diagnosis
- · Arranging appropriate cost-effective and ethical investigations
- Reaching diagnostic conclusions
- Communicating clearly and empathetically
- Educating and providing educational resources for the patient
- Considering different management approaches taking into account relative benefits, risks, and alternatives
- Obtaining appropriate informed consent
- Obtaining help or second opinions from colleagues or other health professionals
- Quickly sourcing reference information with critical appraisal of veracity.
- Prescribing or recommending therapies or procedures
- Personally, undertaking procedures
- Providing sensitive and empathetic emotional support
- Managing the consultation time and health care resources efficiently
- Respecting confidentiality of patient's data Throughout the duration of the training programme, the trainee's acquisition of the various consultation related competencies needs to be supported, and

### TRAINING RELATED TO DISEASES AND THEIR MANAGEMENT

- Functional dyspepsia
- Functional abdominal pain syndrome
- Oesophageal and gastric dysmotility syndromes
- Psychogenic nausea and vomiting syndrome and Cyclic vomiting syndrome
- Abdominal wall syndromes
- Irritable Bowel Syndrome
- Functional diarrhoea and constipation
- Faecal incontinence

# **Oro-Oesophageal Disorders**

## Knowledge of:

- Oesophageal motor function and its related disorders.
- Pathogenesis and clinical significance of GERD.
- Barrett's oesophagus (especially screening protocols)
- Diagnosis, follow up and treatment of dysplasia in Barrett's metaplasia.
- Eosinophilic oesophagitis Tumours of the oesophagus.
- Oesophageal disorders caused by caustic agents, medications, infection, and trauma.
- Diagnosis, investigation, and management of dysphagia
- Diagnosis and treatment of achalasia
- Swallowing disorders in the elderly and oropharyngeal dysphagia
- Management of reflux oesophagitis
- Diagnosis and management of oesophageal strictures
- Management of oesophageal diverticula

# **Oesophageal emergencies**

- Acute dysphagia, including food and foreign body impaction
- Mallory –Weiss tear
- Spontaneous oesophageal perforation
- Post-procedural perforation
- Acute oesophagospasm
- Bleeding oesophageal varices

## Stomach and Duodenum

### Knowledge of:

- H. pylori, NSAID induced ulcer, and idiopathic ulcer disease
- Specific gastritis and gastropathies
- Eosinophilic gastritis
- Refractory peptic ulcer disease
- Stress-related ulcer disease
- Complications of peptic ulcer disease, including surgery
- Indications and complications of bariatric surgery
- Management of premalignant gastric lesions
- Presentation, investigation and treatment of gastric adenocarcinoma, gastric NETS, gastric dysplasia, gastric polyps, gastric GISTS, and Zollinger-Ellison Syndrome

## **Pancreatic Disorders**

- Management of acute and chronic pancreatitis including genetic disorders of the pancreas
- Aetiology of pancreatitis
- Identification, differentiation and treatment of autoimmune pancreatitis and IgG4 disease
- Staging of acute pancreatitis. Management of complications including infected necrosis, pseudocysts, and portal vein thrombosis.
- Nutritional support in pancreatitis.
- Multidisciplinary approach to acute pancreatitis, with radiological and surgical colleagues.
- Diagnosis and management of chronic pancreatitis and exocrine pancreatic insufficiency
- Diagnosis and management of pancreatic tumours and cystic lesions of the pancreas

### Liver

- Diagnostic and prognostic scores to evaluate both severity of disease and response to treatment.
- Increasing frequency of a multi-factorial etiology in liver disease and how it affects patient's management.
- Prevalence of alcohol related problems and the importance of both early diagnosis using questionnaires (CAGE, AUDIT, etc.) and prompt intervention utilizing a multi-disciplinary approach to support and management.
- Identification and management of patients with acute alcohol withdrawal symptoms, distinguishing this presentation from other causes of encephalopathy/coma and acute cognitive impairment in patients with alcohol problems.
- Causes of acute hepatitis including viral, drug and toxin-induced, alcohol, fat related, and autoimmune liver disease and be able to put in place an appropriate plan for the investigation and management of these diseases including the role of serological investigations, non-invasive tests, liver imaging, and liver biopsy.
- Treatment of hepatotoxic poisoning with antidotes.
- Strategies for both prevention and early identification of patients with viral hepatitis in 'at risk' groups encompassing knowledge of vaccination schedules.
- Awareness of international guidelines for the management of specific liver diseases and the need for expert clinician involvement in patient care. Many trainees will achieve competence and experience in the management of viral hepatitis and the details of th this are included in the Advanced Hepatology Module.
- Diagnosis of liver cirrhosis and causation
- Management of the complications of cirrhosis including variceal bleeding, ascites, spontaneous bacterial peritonitis, hepato-renal syndrome, hepatic encephalopathy, and bacterial infections. We particularly emphasize the competent management of acute bleeding.
- Assessment of patients with primary and secondary liver cancer and cholangiocarcinoma including the guidelines for surveillance for hepatocellular carcinoma in cirrhosis. They should have knowledge of treatment principles for primary tumours and metastases including surgery, chemotherapy (general and local), transplantation, local ablation, and radiotherapy as well as targeted treatment.
- Assessment of operative risks in patients with chronic liver disease.
- Objective assessment of nutritional status in patients with liver disease undertaking nutritional support as necessary in conjunction with a nutritional multi-disciplinary team.
- Indications for liver transplantation and need for timely transfer of critically ill liver patient to special care units. Trainees will need to be able to provide basic care for both pre and post liver transplant patients and liaise routinely with liver-transplant hepatologists.
- Management of haemochromatosis, and knowledge of other genetic liver diseases.
- Ability to assess the changes in liver function during pregnancy and identify

pregnancy-related liver diseases. • Evaluation and follow-up of patients receiving ambulatory care.

## **Small Intestine**

Trainees should have knowledge of the:

- Management of global malabsorption and specific nutrient malabsorption, particularly coeliac disease. Lactose and fructose-malabsorption and non-allergic intolerances
- Food protein induced enterocolitis syndrome (FPIES)
- Diagnosis and treatment of bacterial, parasitic and helminth infections of the small intestine
- Small intestinal bacterial overgrowth
- Protein losing enteropathies including Whipple's disease Small intestinal lymphoma
- Small intestinal tumours adenocarcinoma, GIST, neuroendocrine tumours (NET)
- Intestinal failure

# **Small bowel emergencies**

Trainees should be able to recognise:

- perforation
- intussusception
- obstruction
- sub-acute obstruction
- small bowel ischemia

## **Large Intestine**

Trainees should have knowledge of:

- Infectious diarrhoea
- Antibiotic-associated diarrhoea/ Clostridioides Difficile diarrhoea
- The Gut Microbiome
- Diverticular Disease/Diverticulitis
- Mesenteric ischemia
- Diseases of the appendix
- Colorectal polyps
- Anal and colorectal cancer
- Solitary rectal ulcer
- Intussusception,
- Enterocoele,

- Benign anorectal lesions
- Bowen's disease, condylomata
- Proctitis
- Sexually transmitted perianal disease Systemic disease and the gut

# Systemic disease and the gut

- GI tract and hepatic involvement in infectious, endocrine, haematological, metabolic, infiltrative, rheumatological, and vascular disease.
- GI manifestations of primary immunodeficiency diseases.
- GI and hepatic disease in the elderly
- Impact of clinical genetics on GI tract and hepatic disease

## **Inflammatory Bowel Disease (IBD)**

All prospective specialists in Gastroenterology and Hepatology should receive specific training in IBD. This basic training provides the minimum framework required for trainees to diagnose and manage patients with IBD. Some patients may require care from specialists with more advanced training.