

## Gastroenterology Howard University Hospital

### **Overview and Rationale**

Gastroenterology encompasses the evaluation and treatment of patients with disorders of the gastrointestinal tract, pancreas, biliary tract, and liver. It includes disorders of organs within the abdominal cavity and requires knowledge of the manifestations of gastrointestinal disorders in other organ systems, such as the skin. Additional areas include knowledge of nutrition and nutritional deficiencies, and screening and prevention, particularly for colorectal cancer.

The general internist should have a wide range of competency in gastroenterology and should be able to provide primary and in some cases secondary preventive care, evaluate a broad array of gastrointestinal symptoms, and manage many gastrointestinal disorders. The general internist is not expected to perform most technical procedures with the important exception of flexible sigmoidoscopy. However, he or she must be familiar with the indications, contraindications, interpretation, and complications of these procedures.

Goals:

- 1) To acquire the knowledge, skills and attitude to effectively assess and manage the patient with gastrointestinal disease

Objectives: At the end of the rotation the resident should;

- 1) demonstrate the ability to provide primary and secondary preventive care designed to minimizing gastrointestinal pathology
- 2) Demonstrate the ability to assess and manage a wide array of gastrointestinal symptoms.
- 3) demonstrate in-depth knowledge of common gastrointestinal pathology and its management

### **Rotation Description and Lines of Responsibility**

The gastroenterology rotation is a four rotation offered at Howard University Hospital comprising both an outpatient and an inpatient consultative experiential educational experience. The attending gastroenterologist is responsible for all clinical, educational, and administrative activities during this rotation. Residents will also interact with fellows doing subspecialty training in gastroenterology. The fellows will directly supervise the residents' clinical and academic activity. The fellows report directly to the attending physician.

Initially the resident will independently assess and evaluate inpatient consultations from the clinical services at HUH. The resident is responsible for collecting and collating all laboratory and radiological data and the subsequent completion of the consult data base. Patients are presented to the attending physicians during daily teaching rounds, which take place at the bedside. Teaching rounds are patient-based discussions and demonstrations which are evidence-based and involve all aspects of the care of the patient including clinical, diagnostic, therapeutic aspects of care.

Residents will also attend the outpatient gastroenterology clinics. Residents will assess and follow new and established patients in the clinic, under the direct supervision and mentorship of the attending physician assigned to the clinic. The resident will be exposed to the outpatient management of common gastroenterological disorders and appreciate the natural history of these disorders.

During the rotation residents are expected to attend typical gastroenterological procedures such as endoscopic procedures, large volume paracentesis, liver biopsies and ERCP.

## **Teaching Methods**

### **Core Lectures**

A series of lectures covering core elements in gastroenterological diseases will be given throughout the year primarily at pathophysiology conference and at grand rounds. Residents are required to attend these conferences.

### **Teaching Rounds:**

Teaching rounds are held on a daily basis and are facilitated and led by the attending physician. Teaching rounds are patient-based discussions and demonstrations that are evidence-based.

### **Didactics:**

Didactics are done on a daily basis and the residents are required to research and present to the attending physician the following topics;

- Acute abdomen
  - Acute appendicitis
- Ascites
- Biliary tract disease
  - Acute cholecystitis
  - Biliary obstruction
  - Cholangitis
  - Cholelithiasis
- Bowel Obstruction
- Cholestatic liver disease
  - Primary biliary cirrhosis
  - Primary sclerosing cholangitis
- Diarrhea
  - Acute
  - Chronic
- Gastrointestinal bleeding
  - Occult
  - Upper
  - Lower

- Gastroesophageal reflux disease (GERD)
  - Barrett's esophagus
  - Esophageal stricture
  - Uncomplicated
- Hepatitis
  - Drug-induced
  - Viral
  - Infiltrative liver disease
  - Inherited
  - Metabolic
  - Other acquired
- Inflammatory bowel disease
- Intestinal disorders
  - Diverticular abscess
  - Diverticulitis
  - Hemorrhoids
  - Irritable bowel syndrome
  - Malabsorption, maldigestion
- Mesenteric vascular disease
- Malnutrition
- Motility disorders
  - Colon
  - Esophagus
  - Small intestine
  - Stomach
- Neoplasms (see Oncology)
  - Cancer (including hepatobiliary)
  - Colonic polyps
- Pancreatitis
  - Acute
  - Chronic
- Peptic ulcer disease
  - Bleeding ulcer
  - Helicobacter pylori-induced gastritis
  - Perforation, obstruction
  - Uncomplicated ulcer
- Peritoneal disease

### **Journal Club**

Residents are required to participate in this weekly conference

### **Procedure Skills**

- Flexible sigmoidoscopy

- Paracentesis
- Placement of nasogastric tube
- Sengstaken-Blakemore tube (optional)

#### **Primary Interpretation of Tests**

- Fecal leukocytes
- Test for occult blood

#### **Ordering and Understanding tests**

- 24-Hour esophageal pH monitoring
- Assays for *Helicobacter pylori*
- Bernstein test
- Biopsy of the gastrointestinal mucosa
- Blood tests for autoimmune, cholestatic, genetic liver diseases
- Colonoscopy
- Computed tomography, magnetic resonance imaging, ultrasound of the abdomen
- Contrast studies (including upper gastrointestinal series, small-bowel follow through, barium

Enema)

- Culture of stool for ova, parasites
- D-xylose absorption test and other small bowel absorption tests
- Endoscopic retrograde cholangiopancreatography
- Esophageal manometry
- Examination for stool for ova, parasites
- Fecal electrolytes
- Fecal osmolality
- Gall bladder radionuclide scan
- Gastric acid analysis, serum gastrin level, secretin stimulation test
- Viral hepatitis serology
- Lactose and hydrogen breath tests
- Laparoscopy
- Laxative screen
- Liver biopsy
- Mesenteric arteriography
- Percutaneous transhepatic cholangiography
- Qualitative and quantitative stool fat
- Scans of gastric emptying
- Serum B<sub>12</sub> and Schilling tests
- Upper endoscopy

#### **Evaluation Methods:**

##### **Residents**

Residents are evaluated by faculty in a summative fashion at the end of the rotation. A global rating form is used to assess the six competencies.

##### **Faculty**

Faculty are evaluated in an anonymous fashion using a global rating form. These forms are submitted to the program director's office.

**Rotation**

The rotation is evaluated using a global rating. Residents are required to submit these forms at the end of the rotation.

**Reading Lists**