JEWSH HOSPITAL GASTROENTEROLOGY/HEPATOLOGY ROTATION

Goals of the Rotation:
1. Increase knowledge and skills needed for optimal care of patients with common liver problems.
2. Provide exposure to patients with pre-, peri- and post-transplantation care.
3. Exposure is also provided in a wide range of common luminal gastrointestinal problems.

(I) Jaundice
   Causes and evaluation

(II) Approach to the evaluation of abnormal liver enzymes
   Know the differences between Hepatocellular and Cholestatic patterns and how to approach the workup.

(III) Diseases of the Liver
1. Viral Hepatitis – A, B, C, D and E
2. Metabolic, Hereditary, Inflammatory and Vascular Diseases of the Liver
   a) Alcoholic Liver Disease
   b) Drug and toxin induced liver diseases.
   c) Non Alcoholic fatty liver disease (Steatosis and Steatohepatitis)
   d) Hereditary Hemochromatosis
   e) Wilson’s disease
   f) Alpha1 Antitrypsin deficiency
   g) Primary Biliary Cirrhosis
   h) Primary Sclerosing Cholangitis.
   i) Autoimmune Hepatitis
3. Cirrhosis and complications of cirrhosis
   Causes of cirrhosis
   Complications of cirrhosis
   - Portal hypertensive GI bleeding
   - Ascites
   - Spontaneous Bacterial Peritonitis
   - Hepatorenal Syndrome
   - Hepatopulmonary syndrome and Portopulmonary Hypertension
   - Hepatic Encephalopathy
   - Hepatocellular Carcinoma
4. Acute Liver Failure
5. Liver transplant Basics
   Know indications and contraindications for liver transplantation.
   Medical care of the patient who is s/p liver transplant
6. Pregnancy related liver diseases
7. Focal Liver lesions
   Hepatic tumors, Cysts and Abscesses
(IV) Diseases of the biliary tract
   Gallstones
   Acalculous disorders of the biliary Tract (Sphincter of Oddi Dysfunction, Gallbladder dysmotility syndromes, acute acalculous cholecystitis, HIV cholangiopathy)
   Neoplastic diseases of the biliary tract (GB cancer, Cholangiocarcinoma, Ampullary Cancer)

(V) Gastrointestinal Bleeding
   Upper gastrointestinal bleeding
   Causes, evaluation and management including urgent management

   Lower gastrointestinal bleeding
   Causes, evaluation and management including urgent management

   Aspects of management of GI bleeding in cirrhotic patients

VA MC, UNIVERSITY HOSPITAL AND NORTON'S HOSPITAL GASTROENTEROLOGY/HEPATOLOGY
ROTATION

Goals for Rotation:

- Expand knowledge base and management skills of common gastroenterology problems.
- The bulk of exposure in these hospitals are diseases of the luminal GI tract and endoscopy including therapeutic endoscopy.

(I) Symptoms of Gastrointestinal Disorders
1. Acute Abdominal pain
   Causes, differential diagnoses and evaluation

2. Symptoms of esophageal disorders
   a) Dysphagia
      Causes of dysphagia – oropharyngeal and esophageal
      Evaluation
   b) Odynophagia – Definition and Causes

3. Nausea and Vomiting
   Causes and evaluation

4. Diarrhea
   Causes and evaluation
7. **GI bleeding**
   Causes, evaluation and management including urgent management

(II) **Disorders of the Pancreas**
1. **Acute pancreatitis**
   Clinical features and diagnosis
   Prognostic Criteria for Acute Pancreatitis
   Management
   Complications

2. **Pancreatic Adenocarcinoma**
   Clinical presentation
   Diagnosis
   Treatment

3. **Cystic Pancreatic neoplasms and evaluation**
   Serous, Mucinous Cystadenoma
   Intraductal Papillary Mucinous Neoplasia

4. **Pancreatic Neuroendocrine Tumors**

(III) **Disorders of the Intestines**
1. **Diarrhea**
   Causes, evaluation and management

2. **Malabsorption syndromes**
   Celiac Disease
   Pancreatic insufficiency
   Short Bowel syndrome
   Small Intestinal Bacterial Overgrowth

3. **Inflammmatory Bowel diseases**
   Different forms of IBD- Crohn’s disease, Ulcerative colitis
   Risk factors including genetic predisposition
   Clinical features
   Extraintestinal Manifestations
   Diagnosis
   Treatment
   Microscopic Colitis (Lymphocytic and Collagenous colitis)

4. **Dysmotility syndromes**
   Ileus and Pseudoobstruction
   Dysmotility disorders in patients w Diabetes Mellitus
Chronic Intestinal Pseudoobstruction
Ogilvie’s Syndrome

5. Colonic diverticular diseases and their complications (Diverticulitis and bleeding)

6. Intestinal Ischemia
   - Acute intestinal Ischemia
   - Chronic Intestinal Ischemia
   - Colonic Ischemia

(IV) Gastrointestinal Bleeding
   - Upper gastrointestinal bleeding
     - Causes, evaluation and management including urgent management
   - Lower gastrointestinal bleeding
     - Causes, evaluation and management including urgent management
   - Aspects of management of GI bleeding in cirrhotic patients

Obscure GI bleeding-Overt and Covert
   - Causes and differentials including angioectasias and Dieulafoy’s lesions
      - Evaluation modalities
      - Management

(V) Diseases of the biliary Tract
   - Gallstones
     - Acalculous disorders of the biliary Tract (Sphincter of Oddi Dysfunction, Gallbladder
dysmotility syndromes, acute acalculous cholecystitis, HIV cholangiopathy)
     - Neoplastic diseases of the biliary tract (GB cancer, Cholangiocarcinoma, Ampullary Cancer)

OUTPATIENT CLINICS INCLUDING PRIME CLINIC

(I) Symptoms of Gastrointestinal Disorders

1. **Chronic Abdominal Pain**
   - Causes, differential diagnoses and evaluation

2. Symptoms of esophageal disorders
   - c) Globus sensation- Definition and Causes
   - d) Chest pain of esophageal origin
   - e) Heartburn and regurgitation
3. **Dyspepsia**  
   Definition, causes including organic and functional causes  
   Approach to evaluation

4. **Constipation**  
   Causes and evaluation

5. **Esophageal Disorders**  
   a. **GERD**  
      Pathophysiology  
      Diagnosis  
      Treatment  
      Symptoms related to GERD;  
      Esophageal  
      Supraesophageal / Extraesophageal (LPR, Non Cardiac Chest Pain)
   b. **Barretts Esophagus**  
      Pathology, Screening and Surveillance guidelines  
      Treatment  
      Know when to refer - i.e. Finding of dysplasia  
      Know that ablative therapies exist for treatment of dysplasia
   c. **Esophageal adenocarcinoma**  
      Diagnosis and Treatment
   d. **Motility disorders of the esophagus**  
      Hypertonic Motility disorders  
      Hypotonic motility disorders  
      Achalasia
   e. **Esophageal Miscellaneous**  
      Eosinophilic Esophagitis  
      Pill esophagitis  
      Infectious Esophagitis

6. **Disorders of the Stomach**  
   a. **Peptic ulcer diseases**  
      Clinical Features, Diagnosis and Complications
   b. **H. pylori infection**  
      Clinical features, Diagnosis and Treatment
   c. **NSAID induced disorders**  
      Mechanism of NSAID induced gastrototoxicity  
      Treatment  
      Prevention
d. Gastric motility disorders including gastroparesis

e. Complications of Gastric Surgical Procedures
   Complications of bariatric surgical procedures
   Complications of gastric resection procedures

7. Disorders of the Pancreas
   a. Chronic Pancreatitis
      Causes, Diagnosis, management

8. Disorders of the Intestines
   a. Dysmotility syndromes
      Constipation
      Dysmotility disorders in patients w Diabetes Mellitus
   b. Irritable bowel syndrome
      Definition
      Evaluation
      Treatment

9. Colorectal Neoplasms
   Pathophysiology including genetics
   Epidemiology and risk factors
   Hereditary colon cancer Syndromes
   Screening and Surveillance for colorectal neoplasia
      Screening
         Available tests
         Average risk patients
         High risk patients

      Surveillance of patients with colon polyps or cancer
         Colon polyps
         Colon cancer
         Appropriate use of surveillance including intervals

   Clinical presentation of Colonic Neoplasia
   Staging of Colon Cancer

Required Reading:

- MKSAP Gastroenterology Section
- MEDSTUDY Gastroenterology Section
GI guidelines available via an electronic link at
UofL, GI division website
http://www.louisville.edu/medschool/gimedicine/physician-resorces/division-lectures.html
AASLD Practice guidelines
http://www.aasld.org/practiceguidelines/Pages/default.aspx
AGA Medical Position Statement
http://www.gastro.org/practice/medical-position-statements
ACG Guidelines
http://www.acg.gi.org/physicians/clinicalupdates.asp#guidelines

Literature searches done to optimize patient care and supplement knowledge.
Suggested journals:

Suggested Texts for Reading/Reference:
- Tadataka Yamada: Principles of clinical gastroenterology
- Zakim D, Boyer TD. Hepatology: A Textbook of Liver Diseases (Vol 1 and 2).
- Schiff E, Sorrell MF, Maddrey WC (Eds): Schiff’s Diseases of the Liver