

# Gastroenterology - Outpatient

## **Goal**

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.

## **Lead Faculty**

Grace Elta, MD

## **Objectives**

### Patient Care and Medical Knowledge

#### **Dysphagia**

- Differentiate oropharyngeal from esophageal

- Know the general approach to diagnosis

- Oropharyngeal dysphagia

  - Use of barium esophagogram/swallowing study

  - Use of endoscopy

  - Use of ENT/speech pathology

- Know the general approach esophageal dysphagia

  - Use of endoscopy

  - Use of barium esophagogram

  - Know causes of esophageal dysphagia

    - Rings

    - GERD

    - Stricture

    - Pill esophagitis

    - Cancer

  - Know when to include radiology, gastroenterology

#### **Gastroesophageal reflux**

- Know common symptoms

- Know common complications (Barrett's esophagus, stricture, esophageal dysplasia, esophagitis)

- Know use of endoscopy/x-ray

- Know step up/step down treatment of GERD

- Know how to differentiate GERD/NERD

Know when to involve gastroenterology/surgery

### **Chest pain**

Know common symptoms of esophageal chest pain

Know the roles of x-ray/endoscopy/esophageal manometry/24 hr pH monitoring

Know how to use PPI, antimotility agents, antidepressants

Know the role of psychology/psychiatry in management

### **Esophageal cancer**

Know risk factors/alarm symptoms

Know use of endoscopy/x-rays

Know the roles of surgery/endoscopic treatment/chemoradiation

Know the role for hospice/family support

### **Esophageal dysmotility**

Know criteria for/common presentations of:

Esophageal spasm

Nutcracker esophagus

Hypertensive LES

Non specific esophageal motility

Know presentation/pathophysiology/management-Achalasia

X-ray/manometric criteria

Know treatment algorithms in usual patients/patients with comorbidity

### **Dyspepsia**

Know general approach

Know empiric treatment strategy

Know when diagnostic testing is indicated

Know roles of gastric emptying studies/endoscopy/H. pylori/visceral sensitivity

Know natural history and follow up

### **Peptic ulcer disease**

Know role of H. pylori, NSAIDs, acid hypersecretion

Know initial treatment of H. pylori/follow-up strategies

Know risk factors for NSAID induced ulcers

Know options for preventing/treating NSAID ulcers

Know risk factors/diagnosis/treatment of acid hypersecretion (gastrinoma)

### **Diarrhea**

Know causes of acute diarrhea

Know initial treatment of acute diarrhea

Know the approach to chronic diarrhea

Fecal weight

Osmotic/secretory diarrhea

Role of endoscopy/biopsy

Know risk factors for secretory diarrhea

Endocrine tumors

Diabetes

Bacterial overgrowth

Laxative use

Know how to evaluate fat malabsorption

Fecal fat collection

- Small intestinal biopsy
- Pancreatic function tests
- Risk factors/tests for bacterial overgrowth
- Know causes/tests for vit. B12/folate deficiency
- Know how to use Schilling test
- Evaluation for celiac sprue/pancreatitis/post surgical causes
- Know about small bowel tumors
  - Lymphoma
  - Adenocarcinoma
  - Carcinoid tumor

### **Colon cancer**

- Know prevention/screening strategies
- Know use/limitations of colon cancer strategies
  - Fecal blood screening
  - Flexible sigmoidoscopy
  - Colonoscopy
  - Barium x-rays
  - Virtual endoscopy
  - Genetic stool studies
- Know diagnosis/treatment strategies for colon polyps
- Know roles of surgery/adjuvant therapy/radiation/chemoprevention

### **Inflammatory bowel disease (acute)**

- Know acute versus chronic inflammatory bowel disease)
- Know ischemic/radiation/pill induced colitis
- Know acute infectious causes including c. difficile/EHEC
- Initial diagnosis/treatment options

### **Irritable bowel syndrome**

- Know differentiation from Inflammatory Bowel Disease
- Know pathophysiology/causative factors
- Know criteria (Rome Criteria) for diagnosis
- Know treatment strategies/limitations
- Know novel treatments

### **Chronic colonic bleeding**

- AVMs, Diverticulitis, ischemia, radiation-diagnosis/treatment

### **Chronic GI bleeding**

- Know approach to diagnosis
  - Role of colonoscopy/EGD/enteroscopy/wireless capsule endoscopy
- Know treatment options for blood loss anemia
  - Iron supplementation
  - Use of erythropoietin
  - Know role of transfusion of blood

### **Anal dysfunction**

- Know approach to fecal incontinence
- Treatment of hemorrhoid
- Diagnosis/treatment anal fissure
- Defecation disorders

**Diverticular disease**

Know criteria for diverticulitis

Know initial treatment options

Recognize complications of diverticular disease/cause/treatment

Abcess

Obstruction

Fistula

Bleeding

Know radiology/surgery role

**Constipation**

Differentiate from IBS

Know causes (particularly drug induced)

Know definition/management colonic inertia

Know tests for constipation

Colonic marker tests

Nuclear medicine testing

Anorectal manometry

Defacography/balloon expulsion tests

**Chronic pancreatitis**

Know common causes chronic pancreatitis

Know usual presentations/treatment of chronic pancreatitis

Pancreatic pseudocyst

Biliary obstruction

Pancreatic insufficiency

Chronic pain

Role of radiology/endoscopic/surgical treatment

**Practice-based Learning and Improvement**

Discuss the evidence base for various common GI conditions

**Interpersonal and Communication Skills**

Adapt history-taking skills to the mental status and psychosocial presentation of the patient and family.

Communicate with patients and other professionals (other house officers, the attending physician, other services, and other non-University of Michigan facilities).

Obtain informed consent for procedures, weighing the patient's autonomy and participation in health care decisions.

**Professionalism**

Anticipate and address the complexities of family care at home, potential abusive relationships, possible medical compliance problems and financial limitations of health care.

Describe the issues surrounding substance abuse and chronic liver disease, especially in the context of liver transplantation. The issues include substance abuse and alcoholism in a patient to be considered for liver transplantation or in a patient already listed for a liver transplant.

Discuss issues of palliation for patients with gastrointestinal malignancies including the use of laser therapy, luminal stents, blood transfusions, enteral and parenteral alimentation, radiation and chemotherapy, hospice care, effects on employment and family.

Discuss when the DNR status is appropriate and when this issue should be brought up to patients and families, in the patient with end-stage liver disease, gastrointestinal malignancy, and other life-threatening diseases.

Negotiate appropriate management for the hostile or narcotic-seeking patient.

#### Systems-based Practice

Discuss cost issues, directed work-up, indications for endoscopy, potential complications of therapies.

Discuss cost-effectiveness of various treatment modalities.

Interface with non-health care professionals to assist in initial and long-term (post discharge) patient management (interns).

### **Teaching Methods**

Daily rounds

Patient evaluations

Daily teaching conference

Independent readings

### **Evaluation**

Learning goals are established with each resident by the attending at the beginning of the month.

Formative face-to-face feedback to residents by attendings occurs at mid-month. Each month, the attendings complete written evaluations of residents and these learners evaluate the attendings.

### **Resources**

Endoscopic simulation

Direct procedure visualization/optional performance

Up-to-Date™

Common websites (AGA, ACG, ASGE, AASLD)

### **Schedule**

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	7:00 Work Rounds 8:00 Morning Report 9:00 Work Rounds	7:00 GI Radiology Conf 8:00 Morning Report 9:00 Work Rounds	7:00 Work Rounds 8:00 Morning Report 9:00 Work Rounds	7:00 Work Rounds 8:00 Morning Report 9:00 Work Rounds	7:00 Work Rounds 8:00 Morning Report 9:00 Work Rounds
PM	12:00 Noon Conference	12:30 Intern Report	12:00 Noon Conference	12:00 Noon Conference	12:00 Grand Rounds

	2:00 Teaching Rounds 4:30 Clinical GI Conference	2:00 Teaching Rounds	2:00 Teaching Rounds	2:00 Teaching Rounds	2:00 Teaching Rounds
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