GASTROINTESTINAL IMAGING STUDY GUIDE

- Pharynx
  - Normal Anatomy
  - Benign Diseases
    - Diverticula
    - Foreign bodies
    - Trauma
  - Malignant Tumors
  - Motility Disorders
  - Postoperative

- Esophagus
  - Normal Anatomy
  - Benign Diseases
    - Diverticula
    - Trauma
    - Esophagitis
    - Barrett esophagus
    - Rings, webs, and strictures
    - Varices
    - Benign tumors and tumor-like conditions
    - Extrinsic processes affecting the esophagus
  - Malignant Tumors
    - Squamous cell carcinoma
    - Adenocarcinoma
    - Other malignant tumors
      - Lymphoma
      - Kaposi
      - Metastases
      - GI stromal tumor
  - Motility Disorders
o Postoperative Esophagus

• Stomach
  o Normal Anatomy
  o Benign Diseases
    ◆ Diverticula
    ◆ Gastritis
    ◆ Peptic ulcer disease
    ◆ Hypertrophic gastropathy
    ◆ Varices
    ◆ Volvulus
    ◆ Hiatal hernia
  o Malignant Tumors
    ◆ Adenocarcinoma
    ◆ Lymphoma
    ◆ GI stromal tumor
    ◆ Carcinoid
    ◆ Metastases
  o Postoperative Stomach

• Duodenum
  o Normal Anatomy
  o Benign Diseases
    ◆ Congenital abnormalities
    ◆ Diverticula
    ◆ Trauma
    ◆ Inflammatory disease
      - Duodenitis
      - Ulcer disease
      - Crohn disease
      - Aortoduodenal fistula
    ◆ Benign tumors
  o Malignant Tumors
    ◆ Adenocarcinoma
    ◆ Lymphoma
    ◆ GI stromal tumor
    ◆ Metastases

• Small Intestine
  o Normal Anatomy
  o Benign Diseases
    ◆ Congenital abnormalities
    ◆ Diverticula
- Trauma
- Vascular diseases
  - Intestinal ischemia and infarction
  - Radiation enteritis
  - Scleroderma
  - Vasculitides
- Malabsorption
- Inflammatory disease
  - Crohn disease
  - Infectious and parasitic diseases
- Benign tumors
- Malrotation/Volvulus
- Obstruction
- Hemorrhage
- Drug effects
  - NSAID enteritis
  - ACE inhibitors
- Malignant Tumors
  - Adenocarcinoma
  - Lymphoma
  - Carcinoid
  - GI stromal tumor
  - Metastases
- Postoperative
- Colon and Appendix
  - Normal Anatomy
  - Benign Diseases
    - Congenital abnormalities
    - Diverticula
    - Inflammatory diseases
      - Crohn disease
      - Ulcerative colitis
      - Infectious colitis
      - Appendicitis
    - Ischemic colitis
    - Benign tumors
      - Adenoma
      - Mesenchymal tumors
      - Polyposis syndromes
- Adenocarcinoma
- Lymphoma
- Carcinoid
- Melanoma
- Squamous (anal)
- Metastases

- Obstruction

- Pancreas
  - Congenital Abnormalities and Variants
  - Pancreatitis
    - Acute
    - Chronic
    - Complications
    - Autoimmune
  - Pancreatic Neoplasms
    - Adenocarcinoma
    - Cystic pancreatic neoplasms
      - Intraductal papillary mucinous neoplasm (IPMN)
      - Mucinous cystadenomas
      - Serous cystadenomas
      - Solid pseudo/papillary tumor
    - Pancreatic endocrine neoplasms
  - Lymphoma
  - Metastases

- Trauma
- Postoperative

- Liver
  - Normal Anatomy
  - Diffuse Diseases of the Liver
    - Cirrhosis
    - Diseases associated with infiltration
      - Fatty infiltration/nonalcoholic fatty liver disease (NAFLD)/nonalcoholic steatohepatitis (NASH)
      - Hemochromatosis
      - Storage diseases
    - Vascular diseases
      - Portal hypertension
      - Portal vein occlusion
      - Hepatic venous hypertension/Budd-Chiari syndrome/nutmeg liver

- Focal Diseases of the Liver
Benign tumors
- Cavernous hemangioma
- Adenoma
- Focal nodular hyperplasia

Malignant tumors
- Hepatocellular carcinoma
- Metastases
- Other malignant liver lesions

Abscess
- Postoperative

Spleen
- Normal Anatomy
- Splenomegaly
- Benign Disease
  - Cysts
  - Hemangioma
  - Infarction
  - Abscess/microabscesses
  - Granulomatous disease
- Malignant Tumors
- Trauma

Bile Ducts and Gallbladder
- Normal Anatomy
- Congenital Abnormalities and Variants
  - Choledochal cysts
  - Caroli disease
- Inflammatory Diseases
  - Gallbladder
    - Acute cholecystitis
    - Emphysematous cholecystitis
    - Porcelain gallbladder
    - Adenomyomatosis
    - Cholesterolosis
  - Biliary ducts
    - Sclerosing cholangitis
    - Ascending cholangitis
    - Recurrent pyogenic cholangitis
    - AIDS cholangiopathy
    - Ischemic injury
    - Stone disease
• Tumors
  - Gallbladder cancer
  - Cholangiocarcinoma
  - Metastases
• Postoperative

• Peritoneal Spaces
  - Normal Anatomy
  - Fluid Collections
  - Diseases of the Peritoneum
    - Inflammatory diseases
    - Primary tumors
    - Metastatic tumors
• Mesenteries
  - Normal anatomy
  - Pathologic conditions
    - Sclerosing mesenteritis/Mesenteric fibromatosis
  - Metastatic tumors
• Retroperitoneum
  - Normal anatomy
  - Benign diseases
    - Fibrosis
    - Inflammatory diseases
  - Malignant tumors

• Multisystem Disorders
  - Acute abdomen
  - Trauma
  - Syndromes
  - Hernias, including internal hernias

• Pharmacoradiology
• Physics and Safety