GENERAL DIAGNOSTIC RADIOLOGY STUDY GUIDE

The general diagnostic radiology category covers the conditions and diseases a board-certified diagnostic radiologist practicing general/multispecialty radiology may encounter in a community practice. Examinees should expect to see modalities commonly used to evaluate these clinical entities.

- Imaging techniques: indications and limitations (including radiography, CT, MRI, nuclear scintigraphy/PET, bone density studies, diagnostic and therapeutic aspiration and injections, percutaneous biopsy, ultrasound, and bone mineral density)
- Breast Imaging
  - Breast microcalcifications
  - Inflammatory/infectious breast conditions
  - BI-RADS classification
  - Typical breast imaging techniques and imaging strategies
  - Benign and malignant breast masses
- Cardiac Imaging
  - Normal anatomy and variants
  - Pericardial, myocardial, and valvular conditions
  - Coronary vascular anatomy, cardiac anatomy, and variants
  - Pacemaker/AICD/cardiac device related issues
  - Thoracic aortic disorders including aneurysm, dissection, hematoma, vasculitis, and traumatic injuries
  - Congenital heart disease presenting in the adult
  - Imaging of chest pain
- Gastrointestinal Imaging
  - Normal anatomy and variants
  - Acute and chronic abdominal pain imaging findings
  - Abdominal abscess, ascites, and other intra-abdominal fluid collections
  - Pancreatitis
  - Blunt abdominal trauma
  - Peritoneal-based disorders
  - Inflammatory, infectious, and vascular diseases of the bowel
  - Imaging of dysphagia
  - Portal vein and hepatic vein abnormalities
  - Diffuse liver disease, acute and chronic
  - Focal lesions of the liver, spleen, and pancreas
  - Bowel based masses, strictures, volvulus, and diverticula
  - Abdominal hernias
  - Gall bladder and biliary disorders
  - Adenopathy
  - Bowel obstruction
- Musculoskeletal Imaging
  - Normal anatomy, variants, and congenital anomalies
  - Traumatic soft tissue and bone findings, including internal derangement of the joints
Bone and soft tissue tumors
Arthroplasty and other post-operative conditions, expected findings and complications
MSK infections and inflammation
Arthropathies
Metabolic and hematologic conditions
Osteonecrosis
Paget disease
DEXA: diagnosis, technique, and pitfalls

Neurologic Imaging
Normal anatomy and variants of the spine, head/neck, and brain
Spine including disc disease, spinal stenosis, infection, trauma, neoplasm and cord abnormalities
Traumatic conditions of the brain
Intracranial neoplasms
CNS inflammatory, metabolic, and infectious entities
CNS ischemia and vascular abnormalities
Head/neck masses
Head/neck trauma
Orbital pathology
Sinus and mastoid disease
Thyroid disease
Salivary gland pathology
Head/neck infection and inflammation
Head/neck vascular disease

Pediatric Imaging
Normal anatomy and expected developmental changes; normal variants
Thoracic and cardiovascular pathology
CNS/head/neck/spine pathology
Abdominal and GU pathology
MSK pathology

Thoracic Imaging
Normal anatomy, variants, and congenital anomalies
 Mediastinal masses
 Pulmonary embolism
 Pulmonary nodules, lung cancer, and metastatic disease
 Pulmonary infectious and inflammatory conditions
 Interstitial lung disease
 Sarcoidosis
 Airway disease
 Pleural, diaphragmatic, and chest wall disorders
 Pulmonary edema, hemorrhage, vascular malformations, and hypertension
 Thoracic trauma

Urologic Imaging
Normal anatomy, variants, and congenital anomalies of the GU tract (kidneys, ureters, urinary bladder, urethra, and scrotum). See Women’s Imaging (below) regarding gynecologic imaging.
Calculi
GU tract masses
GU tract trauma
GU tract infection and inflammation
Adrenal masses and miscellaneous adrenal conditions
Retroperitoneal masses and inflammation

Vascular Imaging
• Normal anatomy and variants
• Deep venous thrombosis
• Traumatic vascular disease
• Atherosclerotic disease
• Aneurysms and dissection
• Vasculitis
• Vascular malformations and congenital vascular disorders
• Lines, tubes, and devices

• Women's Imaging
  • Normal anatomy, variants, and congenital anomalies
  • Ovarian masses
  • Pelvic infectious and inflammatory conditions
  • Uterine and cervical masses
  • Iatrogenic and traumatic pelvic disorders
  • First trimester pregnancy; normal and abnormal
  • Second and third trimester pregnancy; normal and abnormal
  • Placenta and amniotic disorders
  • Post partum disorders

• Interventional Radiology
  • Abscess drainage/aspiration
  • Paracentesis
  • Thoracentesis
  • Percutaneous cholecystostomy
  • Image-guided core biopsies & FNAs
  • PICC line placement
  • Breast interventional procedures
  • Lumbar puncture
  • Arthrogram/joint aspiration/joint injection
  • Exchange of a catheter over a wire
  • Ultrasound-guided venous access
  • General procedure guidelines