

## 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