

IR/DR Certifying Exam - Computer-based Component Study Guide

This study guide is intended for those preparing for the computer-based component of the Interventional Radiology/Diagnostic Radiology (IR/DR) Certifying Exam.

Topics that may be included:

Arterial Diagnosis and Intervention

- Arterial imaging
 - CT and CT angiography
 - MRI and MR angiography
 - Noninvasive vascular lab (ABI, PVR, segmental limb pressure,
 - Arterial ultrasonography (including color flow imaging, Doppler)
 - Diagnostic arteriography of the chest, abdomen, pelvis, spine, and extremities
- Arterial interventions - examples:
 - Procedures to open blood vessels (recanalization, angioplasty, stent, thrombectomy)
 - Procedures to close blood vessels (embolization – e.g., AVM, trauma, GI bleed)
 - Procedures to kill tissue (e.g., - TACE, TARE, UFE, PAE)

Venous Diagnosis and Intervention

- Venous imaging
 - CT and CT venography
 - MRI and MR venography
 - Venous ultrasonography (including venous color flow imaging, Doppler)
 - Catheter venography
- Venous intervention – examples:
 - Venous access devices and procedures
 - Inferior vena cava filter placement and retrieval
 - Foreign body retrieval
 - Dialysis access intervention
 - Portal/splenic/mesenteric venous intervention
 - TIPS
 - PARTO / BARTO
 - Thrombectomy / recanalization
 - Venous stent
 - Peripheral (and central) venous recanalization/thrombectomy/angioplasty/stents
- Therapy of venous malformations
- Transvenous biopsy
- Venous ablation (varicose veins)
- Venous thrombectomy and thrombolytic procedures

Lymphatic Diagnosis and Intervention

- Lymphangiography
- Lymphatic embolization

Nonvascular Intervention

- Biliary interventions
 - Primary access to biliary tree and gallbladder

- Procedures to treat underlying disease such as malignancy, stone, stricture
 - Procedures to manage long-term biliary drain patients
- Urinary interventions
 - Primary access to the urinary tract
 - Procedures to treat underlying disease such as malignancy, stone, stricture
 - Procedures to manage long-term urinary drain patients
- Gastrostomy and gastrojejunostomy
 - Primary access to GI tract
 - Procedures to treat underlying disease
 - Procedures to manage patients with long-term enteral tubes
- Tumor ablation (e.g., RF, laser, microwave, cryoablation, combination therapy)
- Musculoskeletal interventions
 - Pain management
 - Vertebroplasty, kyphoplasty
- Miscellaneous nonvascular Interventions
 - Fallopian tube recanalization
 - Biopsy (including lung, bone, liver, kidney, adrenal, pancreas, mediastinum, retroperitoneum, other; all modalities)
 - Abscess drainage, tube checks, catheter management (including empyema)
 - Paracentesis, thoracentesis
 - Thoracostomy
 - Pleurodesis
 - Tunneled pleural/peritoneal drainage

Patient Care

- Preprocedure patient care and work-up prior to all IR procedural care
- Postprocedure patient care and follow-up after all IR procedural care
- Professionalism and ethics
- Principles of life support
- Principles of fluoroscopic and radiation safety
- Contrast material (including managing contrast reactions)
- Sedation(moderate/deep), including preprocedure patient evaluation and management of oversedation