Vascular Interventional Radiology Technologist Study Guide


The exam includes questions related to:

- Basic Safety
- Radiation Safety
- Equipment
- Technique
- Patient Care and Risks to Patients
- Pathophysiology
- Interpretation of Findings

Review the following topic areas:

- Protective measures: time, distance, shielding; minimum safe distance; ALARA; personal dosimeter; protective materials, principle hazard to patients and personnel in MRI
- X-ray beams: most intense, dangerous beam; factors that determine attenuation of the beam
- Causes of increased radiation to the patient
- Communication systems such as PACS and DICOM
- Adjustment for special situations such as a patient with osteoporosis, a trauma patient
- Contrast reactions: contrast with highest incidence of reactions; symptoms of a mild reaction; symptoms of anaphylaxis and appropriate action
- Placement of nasogastric tube
- Responsibilities with closed urinary drainage system (e.g. keep closed urinary drainage systems below the level of the bladder)
Catheters: Advantages and disadvantages of types of catheters; choice of catheter for vessel size

Guidewires: choice for various procedures, such as iliac angioplasty; purpose of heparin on guidewire

Angioplasty balloon – substances used to fill the balloon

Risks: embolization procedures; thoracic aortography; trans-hepatic catheterization; rapid administration of contrast; vasovagal reaction

Removal of arterial catheter

Common entry sites for angiography of various body parts

Use of tourniquets in leg venography

Aortography procedures, including: splenic, percutaneous, trans-lumbar, and superior mesenteric

Seldinger technique

Radiographic appearance of pathology, such as aortic occlusion

Common indications for arteriograms

Types of thoracic aortic dissections