

NEURORADIOLOGY

Knowledge Based Objectives: The resident should be able to:

1. Given normal neuro images, demonstrate a proficient knowledge of the anatomy of the head and neck, spine, and central nervous system.
2. Discuss the basic principles of CT and MRI physics.
3. Describe, in considerable detail, CT and MR imaging protocols.
4. Given an appropriate abnormal image, recognize basic neuropathology and give a differential diagnosis.
5. Given appropriate images, demonstrate a thorough knowledge of the vascular anatomy of the central nervous system.
6. Given appropriate neuroradiology images, develop an accurate differential diagnosis.
7. Demonstrate increased ability to recognize pathology and discuss a differential diagnosis.
8. Discuss criteria for modifying studies, depending on the expected pathology or angiographic abnormalities.

Technical Skills: The resident should be able to:

1. Screen, prescribe, and supervise routine neuroimaging procedures.
2. Supervise and screen imaging patient sedations.
3. Demonstrate proficiency in performance and interpretation of cervical, thoracic and lumbar myelograms.
4. Demonstrate proficiency as an assistant angiographer for routine neuroangiography.
5. Dictate neuroimaging studies after review with attending radiologist.
6. Screen, prescribe, and supervise, with an increasing level of responsibility, most neuroimaging procedures.
7. Conduct, with guidance from the attending radiologist, pre-angiographic patient consultation and post procedure patient follow-up.
8. Perform with increasing levels of skill in myelography and angiography.
9. Demonstrate increasing ability to accept responsibility for performance and supervision of neuroradiologic procedures.

Decision-Making and Value Judgment Skills: The resident should be able to:

1. Interact with primary care physicians and neurologists in consultation when more common pathologies are at question.
2. Perform, in a responsible manner, pre-angiography patient consultations and post procedure patient follow-ups, identifying patient conditions that require specific action on the part of the angiography team.
3. Consult, with increasing confidence, with primary care physicians and neurologists in regard to most neuroimaging procedures.
4. Make decisions to modify a neuroangiographic procedure when unexpected pathology or angiographic abnormalities occur, then follow through with the performance and supervision of the procedure.
5. Make decisions based on patient conditions when consulting with the patient pre- or post procedure.