NEURORADIOLOGY GOALS AND OBJECTIVES

Goals & Objectives for Neuroradiology Rotation for Neurology and Pediatric Residents

This elective is offered to residents at the PGY2, PGY3 and PGY4 level. Objectives are similar for residents at all levels.

Patient Care

Goal: The resident rotating on Neuroradiology must be able to understand the role of neuroimaging in patient care that is compassionate, appropriate, and effective for the treatment of neurological problems and the promotion of health. Residents are expected to:

Objectives:
- Understand the indications for neuroimaging examinations and neuroradiological procedures for neurological disease.
- Understand the limitations of neuroimaging examinations for the evaluation of neurological disease.
- Understand the risks, benefits and impact on the patient and family for each procedure.
- Observe and interpret imaging studies of the brain, orbits, facial bones and emergency neuroradiology in the Brain Reading Room.
- Observe and interpret studies of the spine, neck, sinuses and temporal bones in the Spine Reading Room.
- Observe and participate in fluoroscopically-guided lumbar punctures, myelograms and chemotherapy injections.
- Observe catheter-based diagnostic neuroradiology and endovascular surgical neuroradiology procedures.

Medical Knowledge

Goal: The resident rotating on Neuroradiology must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to care of patients with neurological disease. Residents are expected to:

Objectives:
- Understand the role of CT attenuation in the diagnosis of CNS disease.
- Understand the role of MR contrast (T1, T2, T2*, Diffusion) in the diagnosis of CNS disease.
- Understand the process of generating a differential diagnosis based on the imaging findings.
- For cases examined in the Brain and Spine reading rooms, the resident is expected to research relevant history, neurological examination and neurological testing generated by the neurology team in an effort to enhance the diagnostic neuroradiological interpretation.
Practice-based Learning and Improvement
The resident rotating on Neuroradiology must demonstrate the ability to investigate and evaluate their care of neurological patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

Objectives:
- During the diagnostic process the resident should use internet-based, peer-reviewed sources of information to enhance the interpretation of the imaging studies.
- The resident will research topics for the Thursday morning conference with Radiology, Neurology and Neurosurgery.

Interpersonal and Communication Skills
The resident rotating on Neuroradiology must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:

Objectives:
- Act as the liaison between the neuroradiologists, the neurologist and the pediatricians.
- Help to educate the neuroradiologist on the dynamics of communication with families and physicians.

Professionalism
The resident rotating on Neuroradiology must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

- Mandatory attendance of all reading session that do not conflict with clinical commitments.
- Knowledge of the role of the referring physician in protecting the patient from excess exposure to ionizing radiation.

Systems-based Practice
The resident rotating on Neuroradiology must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

- Understand the role of the physicians order, appropriate history and the electronic medical record as they pertain to proper image interpretation.
- Learn the relative cost to the patient and society of neurological imaging evaluations.

ADDITIONAL INFORMATION:
Contact: Pamela Muich Jearls
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When: 8:00 am