

ELECTIVE ROTATION IN DIAGNOSTIC RADIOLOGY FOR NON-RADIOLOGY RESIDENTS

CURRICULUM

The purpose of the resident rotation in Diagnostic Radiology is an introduction to the field of plain film and helical CT cross sectional imaging; to experience direct training and supervision of interpreting radiographic studies, as well as attending a series of lectures and conferences. Appropriate direct correlation and comprehensive review is made on a case-by-case basis with other cross sectional imaging modalities. Facilitated by the PACs system, this provides maximum utilization of radiographic data and other imaging information to obtain a reasonable differential diagnosis of each case. Close clinical information follow up is encouraged to maximize the learning benefit of this rotation and to share/integrate this experience with other members of our department.

DAILY PROTOCOL

Start Time: Residents are expected to attend daily morning conference beginning at 8:00am in the Radiology conference room. Residents then report to the assigned Radiology resident in the CT or ICU reading room. They are to review all cases with the Radiology resident. Subsequently, they should integrate all the information gathered from current and previous imaging, and, taking the current clinical data into account, must obtain a reasonable differential diagnosis.

They are also encouraged to review any possible CT guided biopsy procedure requests, and reviewing with either the Body or IR attending responsible for that day. Again, appropriate clinical histories are required here as well as review of patient's coagulation blood work.

After reading out with the attending, any overnight addendums to preliminary readings should be called in to the appropriate physicians and current ER readings faxed to ER.

Continuous reading of studies will occur throughout the day. Residents are also required to attend all other Radiology or multi-disciplinary conferences that occur during the day.

PERFORMANCE CRITERIA FOR RESIDENTS

Residents will be evaluated on the goals and objectives listed below by means of an evaluation form completed by ERAS by the Radiology Residency Program Director. In addition, interpersonal and communication skills and professionalism will be evaluated by the Chief Resident.

EDUCATIONAL GOALS AND OBJECTIVES

Patient Care:

1. Understand appropriateness of exam requested;
2. Diligently review relevant clinical data, e.g., charts, outpatient records, labs, prior imaging exams; specifically review renal function values, and make certain there are no contra-indications to IV contrast;
3. Obtain a working knowledge of anatomy;
4. Understand importance of diagnosing critical findings.

Medical Knowledge:

1. Understand radiation doses of the various exams including renal stone protocols; attempt to optimize lower doses when possible especially in pediatrics;
2. Have a comprehensive understanding of the pharmaco-kinetics of intravenous contrast and its risks and benefits; also understand various forms of oral contrast, including water, barium and gastrograffin, and the volumes and the roles of when to use them;
3. Basic technique in chest radiography and CT;
4. Common radiographic manifestations of cancer, trauma and infectious disease;
5. Radiographic appearance and proper positioning of common monitoring devices.

Interpersonal Communication Skills:

1. Provide concise and accurate patient presentations to fellow radiology residents, attendings and to relevant clinical services;
2. Call the referring physician for positive results, and document the communication in the report;
3. Learn the recommended terminology for reporting radiographic findings
4. Communicate effectively with all members of the health care team.

Practice-based Learning and Improvement:

1. Learn to address each problem individually, tailoring the performance of the diagnostic test to fit the clinical needs;
2. Pursue opportunities for procedural observation and performance, aggressively organize readout and other educational opportunities;
3. Efficiently use Powerchart and the radiology information system as well as the link to the Reeves Memorial Health Sciences library to access information;
4. Attend GI, pulmonary, and tumor conferences to help assimilate and distribute inter departmental education;
5. Identify, rectify and learn from personal errors.

Professionalism:

1. Demonstrate willingness to perform additional duties that contribute to the overall patient care and academic interests of the section;
2. Demonstrate respect for patients and all members of the health care team;
3. Respect patient confidentiality;
4. Present oneself as a professional in appearance and communication;
5. Demonstrate a responsible work ethic with regard to assignments.

Systems-based Practice:

1. Attend all radiology conferences;
2. Demonstrate knowledge of cost effectiveness of procedures, such as limited low dose lung screening CT for lung cancer; CT small bowel enterography and colonography benefits over more invasive procedures
3. Demonstrate knowledge of ACR standards for chest radiography and CT;
4. Become familiar with ACR appropriateness criteria.

RECOMMENDED READING LIST

Textbook:

Learning Radiology: Recognizing the Basics
by [William Herring](#)

Fundamentals of Body CT
By Webb, Brant, Helms

Online Resource:

www.learningradiology.com

The ACR Cardiac Lecture Series

The ACR Chest Learning File