

## **Radiology Rotation**

### **Goal:**

By the end of the Radiology rotation all residents should have obtained the following attitudes, knowledge, and skills.

(For abbreviations of competencies see key below)

### **Knowledge**

Objective: Upon completion of the training the resident will demonstrate the following competencies.

1. Know normal plain x-ray anatomy of neck, chest, abdomen, and pelvis. (MK)
2. Know normal anatomy of head, chest, abdomen, and pelvis on CT. (MK)
3. Know the obvious and deadly abnormalities on CT and Plain X-ray. (MK)
4. Know the basic concept of MRI/MRA. (MK)
5. Know the basic physics and concepts of ultrasound and nuclear medicine. (MK)
6. Know the basic concepts of bone density scan and different type of the scanners. (MK)

### **Skills**

Objective: Upon completion of the training the resident will demonstrate the following competencies.

Know how to interpret:

1. Plain X-Ray (PC, MK)
  - a. Chest
  - b. Abdomen/Pelvis
  - c. Neck
    - \_\_\_\_\_ Counting C-spines
    - \_\_\_\_\_ Different fractures (stable and unstable)
    - \_\_\_\_\_ Subluxation
    - \_\_\_\_\_ Soft tissue
  - d. T-L spine
    - \_\_\_\_\_ Compression fracture
    - \_\_\_\_\_ Paget's disease
    - \_\_\_\_\_ Ankylosing spondylitis
    - \_\_\_\_\_ Osteoarthritic changes
  - e. Orthopedics
    - \_\_\_\_\_ Common fractures of upper and lower extremities
    - \_\_\_\_\_ Avulsion
    - \_\_\_\_\_ Dislocation
    - \_\_\_\_\_ Erosive joint diseases
    - \_\_\_\_\_ Osteomyelitis
    - \_\_\_\_\_ Osteoarthritis
    - \_\_\_\_\_ Child abuse
  - f. Panorex
    - \_\_\_\_\_ Dental abscess
    - \_\_\_\_\_ Jaw fracture
  - g. Sinus Series

2. Computer Tomography (PC, MK)
  - Know when to use contrast and how to management the complications of contrast
  - Know the obvious and life threatening findings
    - a. Chest
    - b. Abdomen/Pelvis
    - c. Head
3. MRI (PC, MK)
  - \_\_\_\_\_ Know basic terminology of MRI/MRA/MRCP
  - \_\_\_\_\_ Understand the MRI reports (T1, T2, watershed, flare)
  - \_\_\_\_\_ Know when to order MRI vs CT
  - \_\_\_\_\_ Know the basic anatomy in segittal, tranverse, and coronal planes
4. Ultrasound (PC, MK)
  - \_\_\_\_\_ Cholelithiasis
  - \_\_\_\_\_ Venous Compression Tests
  - \_\_\_\_\_ Carotid Doppler
  - \_\_\_\_\_ Chronic Renal Disease
  - \_\_\_\_\_ Pelvic Organs
  - \_\_\_\_\_ Breast Ultrasound
  - \_\_\_\_\_ Cystic Structures
5. Nuclear Medicine (PC, MK)
  - \_\_\_\_\_ V/Q Scan
  - \_\_\_\_\_ Bone Scan
  - \_\_\_\_\_ Cardiolite Stress Test
  - \_\_\_\_\_ Thyroid Scan/Therapy
  - \_\_\_\_\_ DESIDA Scan (with and without CCK)
  - \_\_\_\_\_ Gastric Emptying Study
  - \_\_\_\_\_ Bleeding Scan (red cell tag)
  - \_\_\_\_\_ PET Scan
  - \_\_\_\_\_ DEXA Scan
6. Mammogram (PC, MK)
  - \_\_\_\_\_ Normal Breast Tissue
  - \_\_\_\_\_ Suspicious Calcification
  - \_\_\_\_\_ Spot Compression Views
7. Barium Studies (PC, MK)
  - \_\_\_\_\_ Barium Swallow/Modified Barium Study
  - \_\_\_\_\_ Barium Enema/Air Contrast
  - \_\_\_\_\_ Esophagram
  - \_\_\_\_\_ Upper GI
  - \_\_\_\_\_ Enterocolysis
8. Interventional Radiology (PC, MK)
  - \_\_\_\_\_ CT Guided Biopsy
  - \_\_\_\_\_ Ultrasound Guided Biopsy
  - \_\_\_\_\_ Needle Localization of the Breast Mass