

DIAGNOSTIC PROTOCOLS AND RADIOGRAPHIC GUIDELINES

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QUALITY IMPROVEMENT INITIATIVE

Eastern Radiologists, Inc. is pleased to inform you of a new quality improvement initiative that we would like to introduce to our associate clinic sites. Our goal is the same high standard of radiology professional service across all clinics and hospitals. The QI initiative will include implementation of defined protocol guidelines, routine quality monitoring and radiology technology consultative support. As director of your site, we would like to enlist your support and help in this matter.

Eastern Radiologists, Inc. Diagnostic Radiology Guidelines

Diagnostic Exam Protocol Listing

The guidelines detail the required factors that will be necessary to achieve our quality goals. All exams submitted for interpretive services should be in compliance with these guidelines. Mrs. Lauren Hurdle will be our QI coordinator available to discuss with you any questions that you may have. We will give periodic feedback to all sites based upon our routine quality monitoring.

We thank you for your support on this initiative as we strongly desire to provide the highest level of radiology professional services to your patients and staff.

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EASTERN RADIOLOGISTS, INC. DIAGNOSTIC RADIOLOGY GUIDELINES

All diagnostic radiology examinations submitted for interpretive services should meet the following criteria.

1. Timely submission:

Examinations submitted for a “stat” interpretation should be submitted with a request that it is clearly labeled “stat” and received within one hour of the completion time. Examinations submitted for routine interpretations should be submitted same day or no later than one business day from the time of completion.

2. Projections:

Examinations should be performed in compliance with the **Diagnostic Exam Protocol Listing**. This document is enclosed and details the standard numbers and types of projections.

3. Technique:

Examinations should be performed with optimal technique (gray scale). Routine service by vendors should be performed on all radiology equipment to ensure proper settings.

4. Entire Body Part:

Each image for each examination should include the entire body part.

Example: Forearm exam should include the entire radius and ulna on both AP and Lateral projections. If a wrist exam is also requested on the same patient, it should also include all standard (five) projections and the entire body part on each projection, even though there will be overlap areas. Each projection should be properly collimated to the appropriate body part.

5. Film labeling:

Each image from each exam should contain an identification marker with clearly legible patient information, which at a minimum should include: the patient’s name; medical record number and date. Each image should also be properly labeled with a left/right marker and when relevant a positioning marker. (Example: upright abdomen should have proper indication of positioning).

6. Appropriate indication:

Supporting documentation for each exam should have an appropriate clinical indication, relevant clinical history and location of symptoms or clinical findings.

7. Record of previous exams:

Each exam should be submitted with notation on the request as to whether a prior examination has been performed. This will expedite turnaround times in searching for prior exams to compare with.

DIAGNOSTIC EXAM PROTOCOL LISTING

REQUIRED PROJECTIONS ARE LISTED UNDER EACH EXAM.

Try to collimate, as much as possible, on all views

One projection per film for digital systems*

CHEST/ABDOMEN

CHEST

PA
Left Lateral

STERNUM

RAO (bring tube down to back)
Right Lateral (standing at chest board, if possible)

RIBS

PA Chest X-ray
AP Upper (Inspiration) Ribs (of affected side)
AP Lower (Expiration) Ribs (of affected side)
Oblique Upper (Inspiration) Ribs (of affected side)
Oblique Lower (Expiration) Ribs (of affected side)

ABDOMEN

AP Supine (be sure to include symphysis pubis)
AP Erect (be sure to include diaphragm)

ABDOMEN (KUB)

For kidney stones only!

ACUTE ABDOMINAL SERIES

PA & LAT Chest
AP Supine Abdomen (be sure to include symphysis pubis)
AP Erect Abdomen (be sure to include diaphragm)
*If patient is unable to stand, do Bilateral Decubitus.

EXTREMITIES

ANKLE (Small Cassette)

AP
Internal Oblique
Lateral

CALCANEUS (Small Cassette)

AP Axial (<40° Cephalic)
Lateral (cone to area)
(Do Both Laterals if Comparison is Requested)

CLAVICLE (Small Cassette)

AP
<AP (15° Cephalic)

ELBOW (Small Cassette)

AP
BiLateral AP Obliques
Lateral

FEMUR

AP
Lateral
*Be sure to include both joints;
usually frog-hip and AP Knee also)

FINGER (Small Cassette)

PA Hand
Oblique Hand
Lateral of Affected Finger(s)

FOOT (Small Cassette)

AP
Oblique
Lateral

FOREARM

AP
Lateral

HAND (Small Cassette)

PA
Lateral
Oblique

HUMERUS

AP
Lateral

KNEE (Small Cassette)

AP
Lateral
Tunnel (Beclere Method)
Sunrise (Tangential)
include both patellae

SCAPULA (Small Cassette)

AP
Lateral (Y-View)

SHOULDER (Small Cassette)

AP Internal Rotation
AP External Rotation
Y-View (like lateral scapula but center at and cone down to shoulder joint)
Optional: Cross Table Lateral-Axillary, if unable to do Y-view.

THUMB

PA Hand (also oblique thumb, if not visualized well on PA hand)
Lateral Thumb
AP Thumb

TIB-FIB

AP
Lateral

TOES

AP Foot
Oblique and lateral of affected toe(s)

WRIST (Small Cassette)

PA
Lateral
Bilateral PA Obliques
Navicular View (coned)

HIPS/PELVIS

HIPS

Pelvis and frog-leg lateral of affected side

BILATERAL HIPS

Pelvis and Frog-leg Laterals (done separately on adults)
Pelvis and Frog-leg Laterals (lats done on one cassette - children)

PELVIS

AP
*Be sure to internally rotate toes.

DIAGNOSTIC EXAM PROTOCOL LISTING, CONTINUED

SPINE

C-SPINE (Small Cassette)

AP (< 15° Cephalic)
Lateral
Bilateral PA Obliques (<15° Caudal)
Open Mouth Odontoid
*May request Flexion and Extension (upright)

T-SPINE

AP
Lateral
Upper Obliques (coned down)-small cassette

L-SPINE

AP
Bilateral AP Obliques
Lateral
Spot Lateral
*May request Flexion and Extension (upright)

SACRUM/COCCYX (Small Cassette)

AP Sacrum (<15° Cephalic)
AP Coccyx (<10° Caudal)
Lateral

SACROILIAC JOINTS (Small Cassette)

AP (<35° Cephalic)
Bilateral Obliques (elevate hip 30°)

SKULL/FACIAL

FACIAL BONES (Small Cassette)

AP Orbits (cone to orbits)
Bilateral Oblique Orbits
Lateral Face (Affected side)
Rt. & Lt. Lateral Nasal (Soft tissue technique, be sure to include nasal spine)
Water's
Zygomatic Arches (Submento)
PA Caldwell (<23° Caudal)

MANDIBLE (Small Cassette)

PA
Lateral (Affected Side)
Bilateral Obliques (<25° Cephalic)
Towne's (< 45° Caudal)

MASTOIDS (Small Cassette)

Towne's
Bilateral Schullers (<25° caudal, head true lateral)
*Tape pinna forward

NASAL BONES (Small Cassette)

Water's
Rt. & Lt. Laterals (Soft tissue technique, be sure to include nasal spine)

ORBITS

PA Caldwell*
Water's*
Lateral (affected side)*
Bilateral AP Obliques
*Upright if possible.

SINUSES (Small Cassette)

PA Caldwell (<23° Caudal)
Lateral
Water's
Open Mouth Water's (<30° Caudal)
*All films must be upright!

SKULL (Small Cassette)

AP
PA Caldwell
Towne's
Rt. Lateral
Lt. Lateral
Submentovertex (SMV)

TMJs (Small Cassette)

Exaggerated Towne's
Both Laterals (Rt/Lt) (Open and Closed Mouth)
Schullers (<25-30° Caudal, Head True Lateral)

SPECIAL STUDIES

CHILD ABUSE SURVEY

****Must be screened by pediatric radiologist before procedure as well as before the patient leaves.****

AP and Lateral Skull
AP and Lateral C-Spine
AP and Lateral T-Spine
AP and Lateral L-Spine
PA, Lateral & Bilateral Oblique Chest
AP and Lateral Each Extremity
PA Hands
AP and Lateral Feet
AP Pelvis

METASTATIC BONE SURVEY

AP and Lateral Skull
AP and Lateral C-Spine
AP and Lateral T-Spine
AP and Lateral L-Spine
AP Pelvis
Upper 1/2 Shoulder/Humerus (Bilateral)
Upper 1/2 Femurs (14x17 Crosswise-like pelvis but center low to include 1/2 femurs)