OVERNIGHT RADIOLOGY

Intern Bootcamp

2017

Imaging you should know to be ready for night float
Objectives

• Basic CXR reading
• Basic KUB reading
• Tubes, lines, drains, and devices
• Identifying key abnormalities of above
CXR
How to read a CXR

- Note: name, date, time
- Determine AP (portable) vs PA
- Check quality of the film (exposure, motion, rotation)
- One way:
  - A – airway (trachea)
  - B – bones
  - C – cardiac
  - D – diaphragms
  - E – edges of heart, external soft tissues
  - F – fields of lung
  - G – gastric bubble
  - H – hila
  - I - instrumentation

Take Home

- Have a system when looking at CXRs
- Don’t look straight for the diagnosis
- Other options:
  - Out → In
  - ABCDE
  - Yours?
**Figure 2-1. A normal PA and lateral chest X-ray.**

T: trachea; A: aortic knob; RPA: right pulmonary artery; LPA: left pulmonary artery; R: rib; LA: left atrium; RA: right atrium; LV: left ventricle; LHD: left hemidiaphragm; RHD: right hemidiaphragm; S: scapula. On PA view, note superior vena cava (black arrow) and costophrenic angles (white arrows).
KUBs

- Normal gas
  - Stomach
  - Small bowel
    - 2-3 loops visible
    - < 2.5cm distension
  - Large bowel
    - Usually rectosigmoid air

- Normal fluid
  - Usually in stomach
  - Possible in small bowel
  - None in large bowel
• “Complete abdomen”
  • Supine KUB
  • Prone
  • Erect or L lateral decub
  • CXR
TUBES, LINES, DRAINS, & DEVICES
NG tube placement
NG tube placement
NG tube placement
ET tube placement

- CXR must be taken after intubation to assure proper positioning of ET tube
- ET tubes have a thin, opaque line along the length
- Note the patient’s positioning
  - With head in neutral position, tip of tube should be about 5-7 cm from the carina
  - Flexion or extension can cause tube to move up to 2 cm
Central Venous Catheters

• May be inserted peripherally (PICC) or centrally (subclavian, internal jugular)
• Tip should lie within the SVC, ideally near the cavo-atrial junction
  • Not in the RA → Decreases risk of thrombosis and dysrhythmia
• Need to confirm placement with CXR prior to use
  • Some PICC lines don’t need CXRs
• CXR also identifies complications (e.g. pneumothorax)
ABNORMAL EXAMS
Objectives revisited

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• Basic KUB reading
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References

• First Aid: Radiology for the Wards
• Learningradiology.com
• Radiology Secrets Plus
Questions?