Ordering from Radiology: Choosing the Best Test

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The big questions

- What test do I order?
- Why do I order it?
  - Contrast contraindications
  - Call for help
  - Use the clinician card

- How do I order it?
  - Indication: Signs and Symptoms
  - Pager numbers
Learning Objectives

1. A proper indication for a radiology exam includes signs and symptoms.

2. When in doubt of what to order, call the radiologist.

3. Poor renal function, risk factors for renal disease, asthma are RELATIVE contraindications for IV contrast.
What study do I order?

Many modalities and subtypes

- Radiographs
  - General Radiology
  - Fluoroscopy
  - Angiography
- Nuclear Medicine
- Ultrasound
- CT
- MRI

Deciding what to order is complex!
What study do I order

When in doubt on the appropriate study, call radiology at the following extensions:

Radiology Reading Room
Phone #. (M-F 8am-4pm)

<table>
<thead>
<tr>
<th>Study</th>
<th>Extension</th>
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<tbody>
<tr>
<td>Chest</td>
<td>41319</td>
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<tr>
<td>Abdominal Imaging</td>
<td>41318</td>
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<tr>
<td>GI Fluoroscopy</td>
<td>41257</td>
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<tr>
<td>Neuroradiology</td>
<td>41321</td>
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<tr>
<td>Pediatrics</td>
<td>585-6050</td>
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<tr>
<td>Musculoskeletal</td>
<td>41320/41318</td>
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<tr>
<td>Nuclear Medicine</td>
<td>585-8673</td>
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</tbody>
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After hours or weekends page: 585-2255 #0303 or #0964

305-355-1260 Outside
Pertinent Clinical Information

Should **ALWAYS** include three pieces of information

1. Clinical History
2. Indication for the study
3. The Clinical Question

Breast Cancer; chest pain and short breath; pulmonary embolus?
NO sign or symptom

NO Exam

Must include Pager or phone number
R/O Nothing!

Never use “R/O” or “evaluate for”

Why NOT?

– The radiologist may not be able to suggest the best protocol.

– The radiologist is blind to the overall clinical condition and may not be able to suggest alternative diagnosis.

– This is not acceptable for billing purposes.
Priority

Jackson Health System uses specific prioritization terms as follows:

(In descending order of priority.)

1. STAT
2. Urgent
3. Pending Discharge
4. Today
5. Routine
6. Routine AM
IV Contrast

IV contrast changes the appearance of

- Organs
- Tissues
- Pathology

Structures vs. Pathology
Per Oral (PO) Contrast

PO contrast fills in bowel allows distinction between:
- masses
- collections
- other organs

Gastroview

Water
IV Contrast:

Avoiding Contrast Induced Nephropathy:

- Any risk factor for renal disease
- History of renal disease
- Diabetes
- Multiple Myeloma
- Single Kidney or Renal Transplant

Patients with these conditions **MUST** have a documented GFR over **60** within the last 30 days before receiving IV contrast.
IV Contrast
relative contraindications

If the GFR is less than 60, discuss the circumstances with the radiologist.
Oral or IV hydration

Gadolinium
- Risk: Nephrogenic Systemic Fibrosis
- GFR: Over 30
IV Contrast
relative contraindications

- Iodine or contrast Allergy
  - If mild, medically pretreat
  - If severe, alternative imaging

- Iodine allergy increases risk of Gadolinium allergy

- Contact the radiologist before ordering the study.
Regimen

- 50mg prednisone
  - 13, 7 and 1 hours prior to CT

- 50mg benadryl
  - 1 hour prior to CT
Asthma

- Frequent use of asthma medications
- In mild asthma - bring inhaler to CT scan
Summary

- Always include the clinical history, indication, question and pager # when ordering any radiological test.

- Check the guidelines card OR call the appropriate radiology section to decide the best test to order.
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