

## Commonly Ordered Radiology Procedures And Their Indications

The procedures and indications below are guidelines for commonly ordered Radiology procedures. If you have any questions in regards to ordering or scheduling a Radiology procedure, please feel free to contact the Radiology Department at 740–2673 or a Radiologist at 740–2692.

### **Video Fluoroscopy (Modified Barium Swallow)\***

Focuses on the oral cavity, pharynx, and cervical esophagus.  
Indications include, but are not limited to:

- Aspiration (coughing or choking during swallowing)
- Difficulty swallowing liquids and/or solids
- Sensation of blockage or discomfort to the throat or retrosternal region

Barium is mixed with different food & liquid consistencies to assess the swallowing mechanism.

Exam is performed with a Speech Therapist, with imaging and interpretation provided by a Radiologist.

### **Barium Swallow\*+**

Focuses on the esophagus and its entry into the stomach.  
*This may include an evaluation of the swallowing mechanism with liquid consistencies.*

Indications include, but are not limited to:

- Non–cardiac causes of chest pain
- Symptomatic or suspected gastroesophageal reflux
- Esophageal spasm / tumor
- Suspected tear following an Endoscopic dilatation

### **Upper GI (UGI)\*+**

Focuses on the esophagus, stomach, and duodenum.  
Indications include, but are not limited to:

- Suspected ulcer / hiatal hernia
- Gastroesophageal reflux / pain
- Dyspepsia / Nausea / Vomiting
- Signs and/or symptoms of upper GI bleeding
- Anemia / Weight loss
- Early satiety

### **Small Bowel Follow Through (SBFT)\*+**

Focuses on the small bowel, from the ligament of Treitz to the ileocecal valve.

Procedure with intermittent images can last up to 4 hrs.

Indications include, but are not limited to:

- Unspecified abdominal pain
- Constipation / diarrhea / blood in stool
- History of Crohn's disease / anemia

**\*Contra–indicated** for patients with acute small bowel obstruction

### **Barium Enema Air Contrast (BE)\* ++**

Focuses on entire colon.

Indications include, but are not limited to:

- Change in bowel habits
- Incomplete colonoscopy
- Rectal bleeding
- Diverticulitis or polyps
- History of diverticulitis

#### **\*Contraindications to Barium Contrast:**

Patients who have had recent esophageal/gastric surgery and/or trauma may not be candidates for barium contrast. Consult a Radiologist to determine the appropriate procedure and type of contrast media to be used.

**+ Barium Swallow/UGI/SBFT can be ordered as combined procedures if clinically warranted.**

**++ If a BE exam is to be performed via an ostomy, please make note of this on the physicians order.**

### **Arthrogram**

Evaluates the joint cartilage and other internal joint structures.

Indications include, but are not limited to:

- Joint pain
- Swelling
- Limited range of motion

Shoulder: For suspected tear of rotator cuff or labrum

Hip: For suspected labral tear

Knee: ONLY for patients with contraindication to MRI, and then should be done with CT to follow.

Elbow: Evaluation for pathologic plica

Wrist: Ligament tears and TFCC tears

MRI Arthrogram **is recommended** (2–part study: Fluoroscopic guided injection & arthrogram with an MRI to follow)

CT Arthrogram – for patients who have a contraindication to MRI

At time of scheduling, physicians orders must be included for:

- MRI Arthrogram of selected joint

**\*Contraindications** include allergy to iodine or contrast material (patient should be pre–medicated).

## Arthrocentesis or Injection

*Aspiration of fluid (Arthrocentesis):*

- To differentiate between inflammation & joint infection.
- A completed lab order slip must be included at the time of scheduling.

*Injection of anesthetic & corticosteroids:*

Usually performed upon recommendation of an orthopedic surgeon or rheumatologist

- Multiple joints— each must be ordered separately
- To minimize risk of discomfort/complication, each joint exam will be scheduled at least 24 hours apart

At time of scheduling, please note if aspiration, injection, or both are to be performed.

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## Hysterosalpingogram (HSG)

Evaluates the endometrial cavity and patency of the fallopian tubes.

Indications include, but are not limited to:

- Identify obstructed fallopian tubes
- To ensure proper Essure® device placement
- To visualize polyps / fistulas

Exam is performed by a Gynecological clinician, with imaging and interpretation provided by the Radiologist.

**\*Contraindications** include allergy to iodine or contrast material (patient should be pre-medicated.)

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## Myelogram

Focuses on the central nervous system structures within the spinal cord.

Indications include, but are not limited to:

- Demonstration of a cerebrospinal fluid leak
- Evaluation of radiculopathy
- Spinal Stenosis
- Surgical / Radiation therapy planning
- Contraindication to MRI

This is a 2-part study: Myelography injection is performed in the lumbar region under fluoroscopic guidance with CT imaging to follow. To assess one of these spinal regions:

- Cervical
- Thoracic
- Lumbar
- *If more than one region of the spine is of interest, a Radiologist must be consulted prior to scheduling.*

At time of scheduling, separate orders must be included for:

- Myelogram of selected region
- CT spine without contrast of selected region

**\*Contraindications:**

- Known increased intracranial pressure
- Evidence of bleeding disorder or coagulopathy
- Recent myelography performed within 1 week
- Generalized septicemia
- History of seizures (patient will require premedication)
- Grossly bloody spinal tap
- Localized infection at region of puncture site
- Pregnancy
- Anticoagulant medications (patient will be instructed to hold these meds prior to exam).
- Allergy to iodine or contrast material (patient should be pre-medicated.)

**Relative Contraindications:** Previous surgical procedure in anticipated lumbar puncture site (Radiologist to determine new puncture site).

## Intravenous Pyelogram (IVP)

Assesses function of the kidneys with demonstration of the renal parenchyma, pelvis and calyces, filling/emptying of bladder. Indications include, but are not limited to:

- Pyelonephritis
- Hematuria
- Kidney donor—to evaluate proper kidney function

**\*Contraindications:**

- Pre procedure—Allergy to iodine or contrast material (patient should be pre-medicated.)
- Post procedure—Diabetic medications containing Metformin will need to be held for 24 hrs. A medication alternative should be prescribed if needed.

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## Voiding Cystourethrogram (VCUG)

Focuses on the bladder and urethra.

Indications include, but are not limited to:

- Vesicoureteral reflux
- Suspected posterior urethral valves of the male patient
- To evaluate causes of hematuria such as polyps, meatal stenosis, Cowper's duct cyst, urethral stenosis, or an abnormality of the fossa navicularis

—Sedation & Anesthesia require Anesthesiology consult.

**\*Contraindications** include allergy to iodine or contrast material (patient should be pre-medicated.)

*VCUG studies go to our nursing worklist and are coordinated dependent upon the indications and needs of the patient*

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## Cystogram

Focuses on the bladder's shape and size.

Indications include, but are not limited to:

- Suspected leaking after a pelvic surgery/injury
- To detect polyps or tumors in the bladder
- Follow up abnormality seen on Ultrasound or CT

**\*Contraindications** include allergy to iodine or contrast material (patient should be pre-medicated.)

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## Retrograde Urethrogram

Focuses on the urethra.

Indications include, but are not limited to:

- Suspected urethral injury
- Urethral stricture

**\*Contraindications** include allergy to iodine or contrast material (patient should be pre-medicated.)

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## Chest Fluoroscopy

Indications include, but are not limited to:

- Sniff Test to evaluate diaphragm for paralysis

Wentworth–Douglass Hospital

DEPARTMENT OF IMAGING SERVICES

**RADIOLOGY ORDERING CHEAT SHEET**

7040–146  
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