

 SELECT RADIOLOGY SOLUTIONS A Division of Radiology Imaging Associates	Esophageal Motility Scan		
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Esophageal Motility Scan

Radiopharmaceutical: Tc99m-Sulfur Colloid

Dose: 1 mCi divided into 4 separate 250 µCi doses and combined with 10 cc of water.

T1/2: 6 hours

Energy: 140 keV

CPT: 78258

Indications:

Approved indications include, but are not limited to:

1. Esophageal reflux.
2. Dysphagia.

Patient Preparation:

- Nothing by mouth for 4 hours.
- No gastroesophageal medications on the day of the test.

Equipment:

1. GE 830 Discovery

Procedure:

1. Quality patient instruction is vital to ensure a quality study.
2. Position the camera for the first two upright images.
3. Place a 50 µCi point source on the patient's right shoulder, just below the clavicle.
4. Have patient take the first dose into his or her mouth and hold it there until you give the instruction to swallow.
5. Begin acquisition and instruct the patient to swallow each dose at frame #10 (5 seconds), and dry swallow at frame 60 (30 seconds).
6. Acquire 2 upright and 2 supine image sets, properly labeling each respective set.
7. If a poor attempt is made, prepare another 250 µCi dose and rescan.

Acquisition Parameters:

- Matrix: 128 x 128
- Zoom: 1.00 (Full Field)
- 120 frames at 0.5 seconds/frame
- Position: Seated and Supine
- Orientation: Vertical outside Hi for seated, Feet first supine for supine imaging

Processing/Data sets for PACS

- Screenshot of upright and supine statics
- Composite screen shot of the dynamic data reformatted into summed frames (5 frames per image)
- Dynamic data