Meckel Scan

<table>
<thead>
<tr>
<th>Special Instructions</th>
<th>At the discretion of the referring clinician, patients may be pretreated with an H2-blocker or proton pump inhibitor. See below for suggested pretreatment regimens.</th>
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</thead>
<tbody>
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<td></td>
<td><strong>To be performed at UNMH and SRMC.</strong></td>
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</tbody>
</table>

Radiopharmaceutical: Tc-99m pertechnetate

Dose (Adult/Pediatric): Refer to Nuclear Medicine Dose Chart for radiopharmaceutical doses.

Suggested pharmacologic pretreatment regimens (to be prescribed by the referring clinician, at his/her discretion). Oral medications should be given for 2 days prior to imaging; IV medications should be completed 1 hour prior to imaging.

Any ONE (oral or IV) of the following may be used. Confer with the radiologist if questions.

A. Cimetidine
1. Oral (2 days)
   - Neonates: 10–20 mg/kg/day po
   - Infants and older children: 20 mg/kg/day po
   - Adults: 300 mg 4 times per day po
2. Intravenous (one dose; complete 1 hour before imaging)
   - 300 mg in 100 mL of 5% dextrose IV over 20 min

B. Ranitidine
1. Oral (2 days)
   - Children: 2 mg/kg po
   - Adults: 150 mg/kg po
2. Intravenous (one dose; complete 1 hour before imaging)
   - Infants, children, and adults: 1 mg/kg IV (max 50 mg) over 20 min

C. Famotidine
1. Oral (2 days)
   - Children: 0.5 mg/kg/day po
   - Adults: 20 mg by mouth
2. Intravenous (one dose; complete 1 hour before imaging)
   - Children: 0.5 mg/kg/day IV
   - Adults: 20 mg IV or 0.25 mg/kg IV


Proton pump inhibitors may alternatively be used at the discretion of the referring clinician; no specific recommendations for dose or duration are provided.
Meckel Scan (continued)

Route of Administration: Intravenous

Patient Preparation: None.

Equipment Setup: Gamma Camera: ZOOM in small children as appropriate
Collimator:
  • Orbiter: LEAP
  • SPECT-CT/E-CAM/Evo/Symbia E: High resolution
Computer setup:
  Anterior:
    • Dynamic acquisition
    • 128 x 128 matrix
    • Zoom 1.0 (greater for small children)
    • 1 min/image, 60 images
  Lateral (if needed):
    • Dynamic acquisition
    • 128 x 128 matrix
    • Zoom 1.0 (greater for children)
    • 2 min/image, 1 image

Patient Positioning: Supine, stomach at top right of screen

Procedure:
  • Begin imaging immediately after injection
  • Anterior dynamic images for 60 minutes as above
  • Check with radiologist to see if additional images are necessary (e.g., laterals)
    before releasing the patient

Processing: Anterior 1-hour dynamic images:
  • Merge each 5 images together to display 5-min/frame
  • Labeled savescreens/lightboxes of any additional views or delayed images

Items Required For Complete Study:
  • Raw data of all images to PACS
  • Lightbox/savescreen of anterior images merged to 5 min/image
  • Static display of any additional projections/delayed images
  • Transfer all digital images to PACS
  • Complete the examination in RIS