

Hepatobiliary study for Biliary Leak

Last updated 06.2018

Special Instructions	To be performed at UNMH and SRMC.
Radiopharmaceutical:	Tc-99m Choletec (mebrofenin) or Hepatolite (disofenin, DISIDA)
Dose (Adult/Pediatric):	Refer to Nuclear Medicine Dose Chart
Route of Administration:	Intravenous for radiopharmaceutical
Patient Preparation:	No preparation. <ul style="list-style-type: none">• Patient does not need to be NPO, and morphine or other opioid pain medicines may be used.
Equipment Setup:	<p><u>Gamma Camera:</u></p> <ul style="list-style-type: none">• LFOV camera for adult studies• LFOV camera with ZOOM for studies in small children as appropriate <p><u>Collimator:</u></p> <ul style="list-style-type: none">• SPECT-CT/E-CAM/EVO: High resolution <p><u>Computer setup:</u></p> <p><u>Anterior:</u></p> <ul style="list-style-type: none">• Dynamic acquisition• 128 x 128 matrix• Zoom 1.0 (greater for children)• 1 min/image, 60 images <p><u>Rt lateral and delayed images:</u></p> <ul style="list-style-type: none">• Static acquisition• 128 x 128 matrix• Zoom 1.0 (greater for children)• 5 min/image, 1 image in each requested projection
Patient Positioning:	<p><u>Anterior:</u></p> <ul style="list-style-type: none">• Liver at top left of screen so that gallbladder and bowel can be visualized. <p><u>Right lateral:</u></p> <ul style="list-style-type: none">• Liver at top center of screen

Hepatobiliary study for Biliary Leak (continued)

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Procedure:

Begin imaging immediately after injection

- Anterior dynamic images for 60 minutes as above
- Check with radiologist for additional images. Typically, **drainage bags** should be imaged; if it is not clear which bag is draining bile/gallbladder fossa, consult with the patient's nurse or the radiologist.
- If no leak is seen in the first hour of imaging, the patient will need to return for delayed images. (typically, at 2-4 hours post-injection or longer); check with radiologist to see if re-injection of radiopharmaceutical is needed and regarding timing of delays.

Processing:

Anterior 1-hour dynamic images:

- Merge each 5 images together to display 5-min/frame

Items Required For Complete Study:

- Raw data of all images to PACS
- Lightbox/savescreen of anterior images merged to 5 min/image
- Static or dynamic display of any additional projections/delayed images as noted above
- Transfer all digital images to PACS
- Complete the examination in RIS