

Liquid Gastric Emptying

Similar Studies & Variations

- Solid Gastric Emptying, Combined Solid/Liquid Gastric Emptying

Indications

- For determining gastric dysmotility.

Equipment & Supplies

- 120 mL of water, a camera with a GP collimator
- 1.0 mCi Tc99m SC +/- 10%
- Variation
 - Use 0.100 mCi to 0.125 In-111 DTPA
 - Often used in combination with a solid study (see Combined Gastric Emptying)
 - Requires a camera with a medium energy collimator

Preparation

- While preparing the meal, have the patient void for comfort.
- Put the radiopharmaceutical in the 120 mL of water, being careful not to splash.
- Gently mix the liquid for 10-30 seconds with a wood dowel or syringe

Administration

- Prepare the camera for acquisition before administering the liquid meal.
- Have the patient drink the water within two minutes.

Acquisition

- Immediately after eating, lie the patient on the acquisition table
- Position the camera in a LAO acquisition.
- Acquire a 120 second static image every 15 minutes
 - Images should have at least a 128x128 matrix
- Write down the time of the first acquisition
- Images should be labeled:

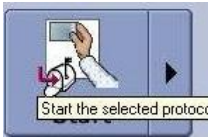
IMMEDIATE LAO	15 MIN LAO	30 MIN LAO
45 MIN LAO	60 MIN LAO	75 MIN LAO
90 MIN LAO	105 MIN LAO	120 MIN LAO
- The study may be ceased by the nuclear medicine physician after 90 minutes if the stomach is completely empty.
- Patient movement between images is possible, but should be strongly discouraged
- Patient emesis halts and completes the test.

Required History

- Is the patient diabetic?
- Dates of any gastrointestinal surgery
- List of any medications taken to stimulate gastric emptying
- Dates of diagnosis of any cancers
- Nausea/Emesis frequency and length occurring
- Abd pain/discomfort frequency and length occurring

Processing

- It is imperative that the images are correctly labeled in Xeleris. If you do not see all nine images, click on the image and ensure that **both** sets of image names are correctly labeled.
- Select the whole study by clicking on the patient name
- If not automatically offered, choose a liquid gastric emptying protocol



- Click on the right arrow next to the icon. Click **Customize**. Click on **General Settings**. Ensure that "Radionuclide used in study" is the nuclide you used. Click **Apply & Quit**, then reselect the study normally.

- Draw an ROI around the stomach in the lower right image (the one with a red border)
- Click Proceed
- Modify or redo the ROI for the remaining images
- Two indicators (vertical dashed green lines) will be in the curve area.
 - Put the leftmost one at the end of the filling, put the rightmost one at the end of the emptying.
 - Per Dr. Wong & Dr. Quinones
- Click Proceed.
- Print this film
- NON-Xeleris processing is not addressed in this protocol.

Hand in Study

- No special instructions

