

Solid Gastric Emptying

Similar Studies & Variations

- Liquid Gastric Emptying, Combined Solid/Liquid Gastric Emptying,

Indications

- For determining gastric dysmotility

Equipment & Supplies

- One egg, two slices of bread, a plate covered by paper towel, gloves for patient, a container to cook the egg in, chuck for a patient bib, 40 mL of water, a camera with GP collimator
- Variation - Use oatmeal in place of an egg sandwich. Make the following changes:
 - Prepare and use oatmeal instead of an egg sandwich
 - Note the substitution on the history sheet **and** requisition
- 1.0 mCi Tc99m SC +/- 10%

Preparation

- While preparing the meal, have the patient void for comfort.
- Place paper towel upon the plate; unwrap the slices of bread and place upon the plate
- Obtain approximately 40 mL of water in a disposable cup
- Crack the egg, placing it into the cooking container
- Inject the TcSC into the yolk of the egg
- Mix the egg
- Microwave the egg in small (30-60 sec) increments
 - Continue until the egg is fully cooked
- Put the egg on the bread

Administration

- Have the patient wear gloves and cover thier chest with an absorbent pad
- Have the patient eat the sandwich and drink the water within five minutes
- The egg portion **must** be eaten, the bread is strongly encouraged
- While the patient is eating, prepare the camera for acquisition

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
- 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 solid gastric emptying protocol
 - Examples: Gastric_Static, Solid Gastric Emptying
- 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

