Fluoroscopy Protocols
Upper G.I. Single Contrast-Adult

FLUGI
Fluoro Time Target Limit: 4.0 minutes

Scheduling and Prep:
* The patient should have nothing to eat or drink from midnight before their exam Until after their exam is completed.
* If the exam is scheduled in the afternoon: The patient should have nothing to eat Or drink for 8 hours prior to the exam time.
(Patient is allowed to brush their teeth)(No water, food, chewing gum, smoking, etc...)
(Only medication that is absolutely necessary with minimal water and as early in the morning as possible)

Supplies:
* Single contrast Upper G.I. barium (L-196 or equivalent)
* 1-Straw and 1-drinking cup with mL Measurements
* Anatomical side marker positioned on the image intensifier
* If for dysphagia: 1-13mm Barium Tablet
* 13 MM barium tablet placed on Image Intensifier-Unless your Fluoro equipment has built-in measuring capabilities

**If the patient has a lap band, do not give a barium tablet unless instructed to do so by The radiologist. If Lap Band-see Gastric Band protocol

For patients with any bariatric surgery (Lap Band, Gastric Bypass or Sleeve) from Dr. Marquez, Dr. Lough and Dr. Acheson. Do not give air crystals or thick barium. Only give thin barium.

Esophagus Imaging:
* Have patient in the upright position
* Slightly oblique the patient to the left. (This will eliminate Superimposition of the esophagus and spine)
* Have the patient hold the barium cup in their left hand.
* Have the patient drink one swallow of the barium and watch to see that it passes into The stomach. If the barium does not flow into the stomach, document and consult with The radiologist.

Spot Images:
* If barium does flow through to the stomach, have the patient drink several swallows in a Row, quickly. Take 3-6 images of the barium filled esophagus. Concentrate on the distal Half of the esophagus and gastro esophageal junction.
Procedure for Imaging the Stomach:
*Lower the table to place the patient in the prone position.
*Have the patient roll onto their right side, and then supine, and then on their left side. (The purpose of this part is to allow the barium to thoroughly coat the stomach lining with barium)

Spot Images of the Stomach:
*Take 3 images of the stomach in progressively less steep obliques.
*One AP of the stomach.
*One Right lateral stomach. (Be sure to roll the patient slightly forward to Clear the barium from fundus)

Procedure for imaging the single Contrast Esophagus:
*Position the patient in the RAO position with their right arm by their side. Have their head on a doubled up pillow. Have them hold the single contrast Barium cup with a straw in their left hand.
*Have the patient drink one normal swallow and just watch the tail of the Barium all the way down. This will show esophageal motility without Gravity.
*Have the patient drink 3 large, fast, consecutive swallows.
*Anticipate 2-4 images, just enough to demonstrate the barium filled Esophagus from superior to inferior.

Spot Images:
*Take images of the barium filled esophagus from upper esophagus to EG junction. Minimal number of images to document the entire length of the barium filled esophagus. (Evaluate for hiatal hernias, Schatzki’s rings, and the duodenal sweep and motility issues.)
*Image the barium filled bulb and barium filled antrum with single contrast filled C-loop. This can often be accomplished in one image.
*Roll the patient supine and check for reflux.

**In order to minimize patient coughing or producing aerosolization (Airborne particles):**
DO NOT: illicit a forced cough when attempting to provoke reflux. Instead, Have the patient swallow their saliva and then tighten their stomach muscles For a few seconds. Then roll the patient enough RPO to place the barium up against the EG Junction And repeat tightening of their stomach muscles.

Document any reflux and label with Reflux and an up arrow.

*Take an AP of all barium coated structures.
**If the patient is having dysphagia, have them swallow a barium Tablet at the end of the study.**

**If aspiration of the barium occurs; stop the patient from drinking, take note if the patient Coughs or does not cough. Consult the radiologist if he / she feels that the exam should Continue or be discontinued. You may still be able to obtain images of the stomach if they Drank enough barium before aspirating.**

**The radiologist is relying on the Fluoro technologist to witness and inform them of reflux, Barium tablet passage, pathology and motility issues.**

**These are the minimum images needed to demonstrate the proper anatomy for this exam.**

**When deemed necessary, more images may be taken to demonstrate pathology.**

**Care should be taken to minimize patient and technologist exposure.**

**Following the procedure, the patient should be instructed to drink extra fluids for 2-3 days To help prevent constipation from the barium.**

Reviewed and Revised May 12, 2020