

- I. **Equipment** *(May vary between sites)*
 - a. Gastrografin (120mL)
 - b. Catheter tip syringe if patient has an NG tube
 - c. SBFT tech worksheet
- II. **Personnel**
 - a. Radiologist/RA
 - i. Responsible for approving scout image
 - b. Hospital Technologist
 - i. Prints order for radiologist/RA review
 - ii. Documents patient history, allergies, and pregnancy status prior to exam
 - iii. Responsible for patient care during exam
 - iv. Administers contrast
 - v. Follows SBFT tech worksheet and reviews images with radiologist/RA
- III. **Procedure**
 - a. Scout image according to site protocol
 - b. Contrast administered
 - c. Timed KUBs
- IV. **Special Considerations**
 - a. Follow contrast allergy protocol
 - b. Adjust NG tube (under fluoroscopy or re-scout after blind adjustment) if necessary before administering contrast
 - c. Follow SBFT recommendations below
- V. **SBFT Recommendations:**
 - a. Water soluble contrast (e.g. gastrografin 100 ml undiluted) should be the preferred contrast agent in the evaluation of patients with known or suspected acute SBO. Water soluble contrast should also be used when there is a suspicion for leakage (e.g. recent bowel surgery, perforated ulcer, trauma). Barium contrast has more favorable imaging characteristics, but for SBO the main goal of the SBS is to determine transit to the colon which gastrografin can adequately do. It can be easier to identify a transition point using barium, but this is usually not the primary goal of the SBS and most patients will already have had a CT done which does a much better job of identifying the area and cause of obstruction. Barium also does not have the hyperosmolar therapeutic effect of gastrografin and has rarely been reported to convert a partial SBO to a complete one.

Caution should be used in administering gastrografin to patients who are at high risk of aspiration (impaired mental status, vomiting, full stomach without decompression). Precautions to avoid aspiration include close supervision of patients with impaired mental status, keeping the head of the bed elevated in all patients, and appropriate NGT decompression before beginning the exam.
 - b. The type of contrast given should be documented in PACS by the x-ray technologist for all fluoroscopic GI exams.
 - c. Patients with an NGT should have the tube clamped until sufficient contrast has progressed into the small bowel, but for no longer than 3 hours. The NGT should be placed back to suction if the patient begins vomiting.
 - d. The SBS should not extend beyond 6 hours. While somewhat arbitrary, this cutoff is needed to ensure that the patient's caregivers receive a timely report. If the SBS does not show contrast in the colon, the radiologist should request that a KUB be done at 24 hours to support an initial diagnosis of high grade to complete SBO, however this should be performed and interpreted as an exam separate from the SBS.

It should also be noted that patients with SBO and generalized peritonitis on physical exam or with other evidence of clinical deterioration such as fever, leukocytosis, tachycardia, metabolic acidosis, and continuous pain should undergo timely surgical exploration, and that these clinical parameters should not be superseded by the performance or results of the SBS.

Approved by:	Keith Dangleis, MD
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