

 Children's Hospital of Wisconsin	Department of Medical Imaging	Fluoroscopy Protocol	
Protocol/EPIC Order: XR Fluoroscopy Small Bowel Challenge			
Last Revision: 7.24.2019			
Approved By: K.Boyd			

Background:

Administration of water-soluble contrast after hospitalization for pediatric adhesive small bowel obstruction may play a dual diagnostic and therapeutic role in management with potential decreases in surgical intervention, LOS, and cost.

Evaluation of a water-soluble contrast protocol for nonoperative management of pediatric adhesive small bowel obstruction. *J Pediatr Surg.* 2019 Jan;54(1):184-188. doi: 10.1016/j.jpedsurg.2018.10.002. Epub 2018 Oct 5.

Applies to patients with:

- History of abdominal surgery
- Clinical signs of bowel obstruction
- Imaging evidence of small bowel obstruction on plain abdominal films or CT scan (CT scan is NOT required to proceed)

Does not apply to patients with:

- Peritonitis
- Clinical suspicion of strangulation
- Known malignancy causing obstruction
- Known or suspicion for non-adhesive small bowel obstruction (incarcerated hernia, volvulus, etc.)

Administration:

- Surgical team will order placement of decompressive NG tube
- NG tube will initially remain to suction for 4 hours after placement
- Surgical team will order contrast through "XR Fluoroscopy Small Bowel Challenge" order
- Imaging tech will deliver the contrast to the floor nurse
- After four hours of NG tube suction, the nurse will discontinue suction and administer the contrast through the NG tube as a bolus (<15 minutes time) and document this administration in the MAR
- After contrast administration the NG tube will be clamped for 1 hour and then placed back to suction
- The nurse will notify the imaging technologists (x63116) of the time when contrast was given and documented in the MAR
- If the patient begins vomiting contrast while the NG tube is clamped, the NG tube should be placed back to suction. Continue with timed x-rays. Do not administer additional contrast.
- In rare circumstances the contrast may be administered orally or down a gastrostomy tube

Imaging Protocol:

Portable supine AP abdominal radiograph (KUB) performed at 10 and 24 hours after contrast administration. If contrast is present in the cecum at 10 hours, the exam is complete and no 24 hour film is necessary.

Contrast Agent: Omnipaque 240

Dose:

- Less than 3 months: 30 mL
- 3 months - 3 years: 60 mL
- 4 years – 10 years: 150 mL
- Age 10 years or greater: 200 mL