Clinical history and physical examination

Small bowel obstruction

Acute or high grade

Recurrent or low grade

AXR

Diagnosis

Indeterminate

Treatment

CT abdomen and pelvis / MRI abdomen and pelvis / small bowel follow-through

CT abdomen and pelvis, CT/MRI/Fluoroscopic enteroclysis, CT/MRI enterography, small bowel follow-through
REMARKS

1 Plain radiograph
   1.1 Often the first line investigation to detect the presence of obstruction.¹
   1.2 Useful to establish if bowel obstruction is high or low grade.²
   1.3 For patients in whom a strong clinical suspicion of small bowel obstruction is present, consideration should be given to immediate cross-sectional imaging, particularly CT.³

2 CT
   2.1 Standard CT, performed with an intravenous (IV) contrast if possible, but generally without oral contrast, is the primary imaging modality for evaluating small bowel obstruction and should be strongly considered in the initial evaluation of patients with suspected high-grade small bowel obstruction.³
   2.2 When abdominal X-ray (AXR) is equivocal and low-grade, and subacute small bowel obstruction is suspected clinically, CT enteroclysis has a higher site-specific sensitivity and specificity than standard CT.²

3 Small bowel study
   3.1 In suspected small bowel obstruction due to adhesions, presence of water-soluble contrast in the colon on a plain radiograph obtained 24 hours after oral administration of 100 ml water-soluble contrast medium is a good predictor of resolution without operation.²
   3.2 Fluoroscopic small bowel examinations play a much less substantial role and should not be used as a primary imaging modality in diagnosing an acute small bowel obstruction.³
   3.3 If intermittent, recurrent, or low-grade small bowel obstruction is a primary concern, an enteroclysis is likely the next best test.³

4 MRI
   4.1 Children and in particular pregnant patients with known or suspected small bowel obstruction, as well as younger patients with repeated episodes of obstruction, are the ideal population to undergo MRI. In pregnant patients, only non-contrast sequences are obtained. In non-pregnant individuals, sequences with or without IV gadolinium contrast can be performed.³

REFERENCES