



REMARKS

1 Malrotation / midgut volvulus

- 1.1 Midgut volvulus is an emergency situation. It should be considered in patients with bilious vomiting.
- 1.2 Contrast upper GI series is the preferred examination. Barium is usually used, except in suspected perforation or high risk of aspiration. Low-osmolarity contrast media are used in extremely ill or premature neonates.
- 1.3 US is limited by operator experience and incomplete examination due to overlying gas.

2 Gastroesophageal reflux (GER)

- 2.1 Extended pH probe is currently the gold standard for diagnosis. Preference for the other methods in the diagnostic work-up of GER varies among different centres depending on expertise and availability.
- 2.2 GER is the commonest cause of recurrent non-bilious vomiting. Abdominal X-ray (AXR) does not have a role in diagnosis of GER, and is indicated for additional clinical conditions, e.g. obstruction.
- 2.3 Contrast upper GI series or nuclear medicine examination are advocated only when failure of conservative treatment, development of complications or life threatening symptoms occur.
- 2.4 Upper GI series and nuclear medicine examination (Tc-99m-labelled sulphur colloid scan) show similar sensitivity, and upper GI series allows anatomical evaluation e.g. obstruction and structural abnormalities.
- 2.5 US can provide functional and morphologic information. However, its diagnostic performance on GER is variable.

3 Hypertrophic pyloric stenosis

- 3.1 AXR should not be routinely obtained when the diagnosis is strongly suspected.
- 3.2 US is the preferred method for diagnosis but it requires considerable experience. Repeat US in 48 hours is recommended in case of doubt. Contrast upper GI series is limited by its ionizing radiation, and should be used when other causes are suspected.

4 Intussusception

- 4.1 Intussusception is a frequent cause of crampy abdominal pain, which can be accompanied by vomiting in children.
- 4.2 The main reason for obtaining plain radiographs is to look for the presence of free intraperitoneal air and degree of small bowel obstruction. US is a sensitive diagnostic method.
- 4.3 Pneumatic reduction under fluoroscopic guidance is used to reduce intussusception, only where specialist equipment and expertise is available.

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