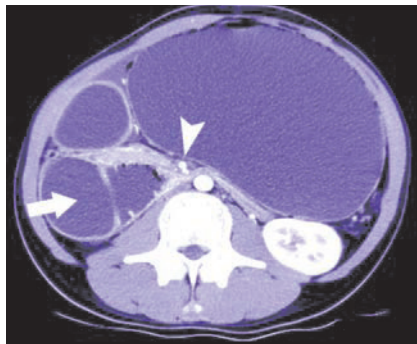
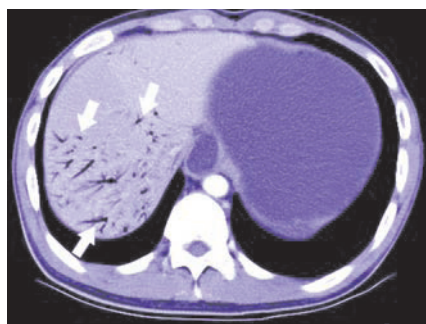


Superior mesenteric artery syndrome with hepatic portal venous gas

A 17-year-old man with a slim build presented with recurrent postprandial epigastric fullness and bilious vomiting. He was acutely unwell. An abdominal radiograph showed gastric and duodenal distension.



A: Computed tomography (CT) scan showing proximal duodenal dilatation (arrow) tapering towards the point of obstruction (arrow head), resulting in the triangular shape of the duodenum.



B: CT scan showing extensive hepatic portal venous gas (arrows) and a massively distended stomach. ♦

Contrast computed tomography scans showed proximal duodenal dilatation (Box, A, arrow), with a triangular-shaped duodenum, extensive hepatic portal venous gas (Box, B, arrows), and a massively distended stomach.

Superior mesenteric artery syndrome with hepatic portal venous gas was diagnosed. This syndrome occurs when the fat pad between the superior mesenteric artery and its origin at the aorta is lost, causing a sharp, narrow angle at the aortomesentery junction. The third portion of the duodenum is compressed and becomes obstructed when passing through this angle.¹ Hepatic portal venous gas can develop as a result of bowel ischaemia.

Surgical therapy with duodenojejunostomy is the treatment of choice for a severely ill patient, or when more conservative treatment has failed.²

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