# Isolated gastric tear due to blunt abdominal trauma

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#### **Abstract**

A 7 years old child presented with a history of be fall from a height(10 ft approx). The child had ingested a large meal in the hour preceding the injury. He complained of generalized pain in the the abdomen. He was haemodynamically stable. Abdominal examination was unremarkable initially but soon child developed abdominal distension & generalized tenderness. X ray abdomen(erect) showed gas under diaphragm. Ultrasound abdomen did not show any solid organ injury. At laparotomy the only injury found was a complete tear of the greater curvature of stomach. The tear was sutured and the patient made an uneventful recovery.

#### INTRODUCTION

In blunt abdominal trauma incidence of injury to the solid organs is much higher than that to the hollow viscus nonoperative management of solid organ injury from blunt trauma in children has focused concern on potential delays in diagnosis of hollow viscus injury with resultant increases in morbidity, mortality, and cost<sub>1</sub>.

## **CASE REPORT**

A 7 years old child presented with a history of be fall from a height(10 ft approx). The child had ingested a large meal in the hour preceding the injury. He complained of generalized pain in the the abdomen. He was haemodynamically stable. Abdominal examination was unremarkable initially but soon child developed abdominal distension & generalized tenderness. X ray abdomen(erect) showed gas under diaphragm. Ultrasound abdomen did not show any solid organ injury. At laparotomy the only injury found was a complete tear of the greater curvature of stomach. The tear was sutured and the patient made an uneventful recovery.

Figure 1



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Figure 2



#### DISCUSSION

Injuries to the stomach are very rare in blunt abdominal trauma. The stomach has very strong walls and these are not torn by blunt trauma unless it is very severe or the stomach is full, or both. Such trauma commonly involves adjacent organs like the liver, spleen, and pancreas. Apart from injuries to the anterior gastric wall, total rupture of the gastro-oesophageal junction, complete circular avulsion of the stomach from the duodenum, and rupture of both the gastric walls, have been reported due to blunt abdominal trauma. All of these were associated with a solid organ injury.

In our case there was an injury only to the greater curvature of stomach. There was no other intra-abdominal injury. We, after extensive literature search, believe that this is the only case of isolated greater curvature of stomach injury being reported. The most probable mechanism of injury in this patient was injury on a full stomach. Initial clinical and radiological evidence of bowel perforation can be misleading and reliance on such indicators may result in significant diagnostic delay. Frequently repeated clinical examination is advocated; progression of abdominal signs should alert the clinician to proceed to laparotomy.

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