Paraduodenal Hernia - a Case Report
A. Munir, S. M. Saleem, S. Hussain
Section of Pediatric Surgery, Department of Surgery, The Aga Khan University, Karachi.

Introduction
Internal hernias, herniation of a segment of intestine into an intraperitoneal fossa, are uncommon causes of intestinal obstruction and are difficult to diagnose pre-operatively.¹ We report a case of one and a half year old male infant presenting with para-duodenal internal herniation of small bowel.

Case Report
We report a case of a one-year-old boy who presented to the emergency room with 36-hour history of abdominal pain and vomiting, progressing from non-bilious to bilious and ultimately faeculent. There was also history of constipation and abdominal distension. Prior to this episode, the child was well with no co-morbid conditions.

Examination revealed a listless, tachycardic and dehydrated infant with distended abdomen, which was tense and tender. The plain abdominal X-ray was consistent with intestinal obstruction (Figure 1). The provisional diagnosis of intussusception was made. After initial resuscitation a contrast enema was done, which showed downward displacement of transverse colon with distended small bowel loops (Figure 2). There was partial hold-up of contrast in mid-transverse colon (Figure 3). Exploratory laprotomy for mechanical bowel obstruction was planned. On exploration there was serosanginous peritoneal fluid,
with stretched out collapsed transverse colon. Small bowel was seen herniating through the mesentery of transverse colon, which was stretched on it (Figure 3). After reduction of small bowel, the defect was identified to be in left paraduodenal space. Bowel was reduced which was congested but viable and than the defect was repaired with vicryl, taking care of the vessels at the mouth of the defect.

**Discussion**

Internal hernias are uncommon and rarely diagnosed pre-operatively. Internal abdominal hernias are defined as the herniation of a viscus through an intraperitoneal orifice or aperture within the confines of the peritoneal cavity.

Incidence has been variably reported to be 1-2%.

The hernias may be discovered as incidental findings at the time of laprotomy or autopsy, or they may give rise to chronic dyspeptic symptoms. It may present as complication in the form of bowel obstruction, strangulation or perforation. Internal hernia is an un-common cause of bowel obstruction with a reported incidence of 0.2-0.9%.

The orifice of the internal hernia may be normal (Winslow’s foramen) or abnormal (Para-duodenal, Ileocecal etc) or pathological (orifice formed in a mesentery or omentum) or anomalis orifice.

More than 50% of internal hernias reported in the literature have been paraduodenal. Seventy-five percent of para-duodenal hernias occur on the left, while 25% occur on the right. They originate at the fossa of Landzert which is just lateral to the fourth segment of the duodenum and behind the IMV and ascending left colic artery. Right paraduodenal hernias protrude into the ascending colon, which was stretched on it (Figure 3). After reduction of small bowel, the defect was identified to be in left paraduodenal space. Bowel was reduced which was congested but viable and than the defect was repaired with vicryl, taking care of the vessels at the mouth of the defect.

**References**