

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Paraduodenal Hernia - A Rare Cause of Recurrent Abdominal Pain.

Rugmini Kamalammal, A Abdul Aziz*, Gunasekaran Anandan, S Santha Kumar, and M Shafath Ahmed.

Department of Paediatrics, Sree Balaji Medical College and Hospital, Bharath University, Chrompet, Chennai 44, Tamil Nadu, India.

ABSTRACT

Paraduodenal hernia the most common form of congenital internal hernia, is often diagnosed only during an acute symptomatic episode like strangulation. The incidence of strangulation in these hernias is around 50%. Here we report a case of left paraduodenal hernia which presented as recurrent abdominal pain for a period of six months. This article highlights the fact that congenital internal hernia is to be considered as a differential diagnosis in case of recurrent abdominal pain, though the incidence of the same is rare. Early diagnosis and management of this condition can prevent acute strangulation which is a surgical emergency.

Keywords: Paraduodenal hernia, Recurrent abdominal pain.

**Corresponding author*

INTRODUCTION

Paraduodenal hernias accounts for 53% of all congenital internal hernias. It is more common in men and is seen usually on left side [1]. It accounts for 0.9% of all intestinal obstruction [2]. It results from abnormal rotation of embryonic gut resulting in a part of bowel, usually small bowel abnormally protruding through intraabdominal orifice. The orifice is usually the Foramen of Winslow. Acquired paraduodenal hernias are not unknown.

The clinical presentation may vary from mild abdominal symptoms to acute presentation as intestinal obstruction. 50% of patients with paraduodenal hernias had intestinal obstruction[3]. It is rarely diagnosed in children unless the child present with surgical emergencies. Hence, it is important to diagnose the condition early in cases of recurrent abdominal pain.

THE CASE

A 11-year-old girl was admitted to our hospital with acute abdominal pain for eight days duration, and it was more in the epigastric region. She had associated nausea but no vomiting. There was no relationship with food intake. The pain was present even during night time and the child used to have irregular sleep due to the pain. She had history of recurrent episode of similar abdominal pain for the last six months.

Figure:1



Figure:2



Images Showing Lax OGJ

Figure:3



Figure:4



Figure:5



Figure:6



Images Showing Paraduodenal Hernia

On examination, the patient was moderately nourished and was not anaemic or jaundiced. Abdominal examination was normal except for mild tenderness at the epigastric region. Other systems were normal. Investigations like complete blood count, reticulocyte count, liver function test, renal function test, serum amylase were normal but serum lipase was increased. Upper GI endoscopy showed lax oesophagogastric junction [figure1&2]. Ultrasound abdomen was normal. CT abdomen showed a cluster of small bowel loops appearing encapsulated between the posterior wall stomach and pancreas, no bowel dilatation or air fluid levels were seen [Figure3-figure6]. Patient was advised surgical correction but was not willing for surgery.

DISCUSSION

Our child who presented with recurrent abdominal pain for last six months had no other gastrointestinal symptoms. But the child had episodes of awakening in the night due to abdominal pain which was characteristic of an organic cause being the reason for symptoms. The child had taken treatment from various institutions for the same complaints which never gave her relief. With high index of suspicion, the child was subjected to abdominal imaging which is the diagnosis of choice of this type of hernias. The imaging technologies which are suggested are barium studies or contrast enhanced CT abdomen and Magnetic resonance imaging. In all three modalities, diagnosis is by the presence of clustered well circumscribed small bowel loops in the posterior between descending colon and adrenal gland displacing stomach, pancreas and duodenojejunal junction is characteristic of left paraduodenal hernia. Inferior mesenteric vein may run anteromedial border of hernia. Additional findings suggested are changes in mesenteric vasculature such as engorgement, twitching and crowding [3].

The clinical diagnosis of paraduodenal hernias highly is challenging. Patient usually presents with vague abdominal symptoms which are usually labeled as functional gastrointestinal problems[4]. Other factors can be postprandial nausea and vomiting and also aggravation of symptoms while standing and resolving in the supine position [3]. Clinical diagnosis of paraduodenal hernia in children as a cause of recurrent abdominal pain is rare. Literature shows that the mean age of diagnosis is 28 to 39.5 years. Imaging the hernias during the asymptomatic period may be unsuccessful [3].

Our case has the typical CT picture described above as cluster of small bowel loops appearing encapsulated seen between the posterior wall stomach and pancreas, no bowel dilatation or air fluid levels was seen.

Management is surgical correction of the hernias, with reduction of hernia and eliminating the defect by closure or widening of hernial orifice if it is not reducible. Special care should be taken to avoid injury to inferior mesenteric vein. Minimally invasive laproscopic approach is advisable [5]. Apparent bowel ischemia or gangrene is considered contraindication for laproscopic approach of management [3].

CONCLUSION

Increased awareness and high index of suspicion among physicians is necessary for diagnosis of this condition which may present with the trivial symptoms. Early diagnosis avoids acute surgical emergencies like intestinal obstruction and gangrene. Moreover early diagnosis facilitates minimally invasive laproscopic approach for surgery.

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