

## Obstructed Stammer's Hernia: A Rare Case Report

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### Summary

*A male of 20 years presented with features of acute intestinal obstruction of small gut. He gave history of similar attack for several times in the last 13 years. On laparotomy a portion of viable small gut was found to be*

*herniated through a defect in the mesentery (stammer's hernia). Closure of the defect was done and postoperative period was uneventful.*

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### Introduction

Stammer's hernia (herniation through a defect in the mesentery) is a type of internal hernia and internal hernias are rare but are important cause of intestinal obstruction (0.2-0.9% of all cases)<sup>1</sup>. They are often undiagnosed before emergency laparotomy and not uncommonly lead to gangrene necessitating bowel resection of varying extent and this may contribute to high morbidity and mortality.

### Case report:

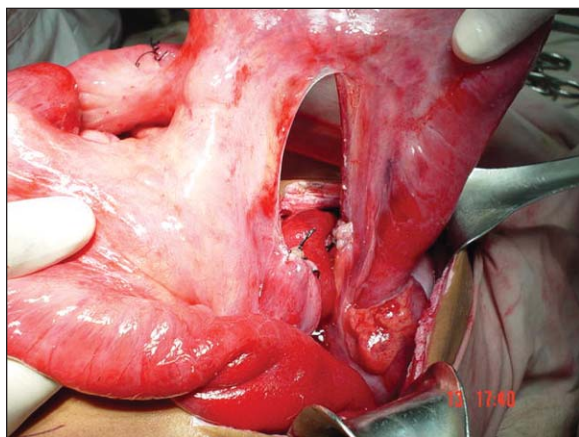
A 20 years old male presented with pain in the abdomen, vomiting and gradually distending abdomen for two days. Pain was sudden, severe, central abdominal, colicky and gradually increasing in intensity. He vomited several times and the vomitus contained bile stained fluid. Abdominal distension was gradual. He gave history of similar type of attack in the past for several times starting at his seven years of age, which were managed conservatively. He had tachycardia (pulse- 140 beats/minute, thready and of low volume), blood pressure was 80/60 mm of Hg. and body temperature was normal. Abdomen was distended, rigid, tender with presence of muscle guarding. Digital rectal examination revealed empty ballooned rectum. There was electrolyte imbalance (hypokalaemia, serum potassium : 3 mmol/l) and plain X-ray abdomen in erect posture showed features suggestive of small gut obstruction (Fig-1). After appropriate resuscitation a decision of exploratory laparotomy was made.

During exploration of abdomen haemorrhagic ascitic fluid came out and small gut was found to



**Fig-1 :** Plain x-ray abdomen in erect posture showing features of small bowel obstruction.

be distended. A portion of small gut was found to be invaginated through a defect (6cm x 3cm) in the lower end of the mesentery. The portion of small gut proximal to the obstruction was distended, thick walled and viability was doubtful (Fig-2). After decompression of the gut, warm mop application and increased flow of oxygen, viability returned. The anatomical defect in the mesentery was repaired & abdomen was closed in layers. Postoperative period was uneventful and patient was discharged on the ninth postoperative day.



**Fig-2 :** *Peroperative photograph showing defect in the mesentery.*

#### **Discussion:**

Herniation of small bowel through a gap in the mesentery (Stammer's hernia) is a rare cause of small bowel obstruction and seldom diagnosed preoperatively partly because of unfamiliarity with this type of internal hernia. Since internal hernias are rare but important causes of intestinal obstruction (0.2-0.9% of all cases)<sup>1</sup>, they are often diagnosed during laparotomy.

Internal hernias are often classified as developmental, congenital or acquired. By definition, developmental internal hernias cause obstructive symptoms in the absence of any previous intraabdominal interventions. Again herniation through a defect in the mesentery is not a true hernia rather it is internal prolapse since it does not have a sac.

The reported incidence of all internal hernias varies between 0.2 and 0.9% of the autopsies, 0.3-2% of parietal hernias and 0.01% of laparotomies<sup>1</sup>. Overall condition is more common in males (Male : female= 3:2). The age distribution varies widely but peak symptomatic incidence is in the fifth decade. The clinical symptoms of internal hernia may be intermittent and non specific making the diagnosis

extremely difficult. Vast majority of patients (90%) present with features of acute intestinal obstruction which is often strangulating with evidence of established peritonitis(30-60%).

One should stress in the importance of plain radiological findings as diagnostic aids. A consistent intestinal gas imaging after some interval suggests the possibility of an internal hernia, specially when accompanied by a circular or oval defect of the gas shadow in the middle of the abdomen<sup>2</sup>. A serial abdominal X- ray study can be helpful. Diagnosis of internal hernia with CT is difficult<sup>3</sup>. Special attention should be given to the clustering of bowel loops, the mesenteric vessels and signs of small bowel obstruction.

The essence of good management is early intervention (laparotomy) as this is the only means of preventing gangrene of the bowel. The surgical treatment consists of reduction of hernial contents, resection of gangrenous bowel, (if, any), primary anastomosis and correction of anatomical defect.

The hospital stay, mortality (up to 30% in long series) and morbidity depends on the presence or absence of bowel infarction. In the rare instances, when an internal hernia is discovered after investigation of chronic symptoms, elective surgery is needed because of the pathogenic potential of this condition.

#### **References:**

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