Uncommon Presentation Of Inguinal Hernia: Burst Obstructed Inguinal Hernia With Ileo-Ileal Intussusception

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Abstract
Burst obstructed inguinal hernia with ileo-ileal intussusception as hernia content is an extremely rare condition. We are reporting such a finding in a 60-year-old female patient. This condition requires emergency surgical intervention. We did emergency laparotomy with reduction of the obstructed inguinal hernia, resection of the perforated bowel segment with ileo-ileal intussusception, end to end anastomosis and repair of the inguinal defect.

INTRODUCTION
The overall incidence of inguinal hernia in adults varies from 10% to 15%. The male to female ratio is 12:1. An obstructed inguinal hernia is one in which the bowels are obstructed at the neck of the hernia sac and are not reducible (large hernia through narrow opening). Obstructed inguinal hernia usually occurs in indirect inguinal hernia. Because of obstruction, initially there is compression of the mesenteric veins. The increased venous pressure causes edema of the bowel wall with compression and obstruction of the veins going on to venous infarction and gangrene of the bowel loops and omentum in the hernia. The local findings are extreme pain and tenderness, swelling, edema, redness of skin and irreducibility. The systemic manifestations are those of bowel obstruction and gangrene leading to serious fluid and electrolyte imbalance. The mortality is directly related to the length of time of obstruction and to the age of the patient. Obstructed inguinal hernia presents as an emergency.

Intussusception occurs when one portion of the gut becomes invaginated within an immediate adjacent segment. Invariably, it is invagination of the proximal into the distal bowel. It is most common in children, primary or secondary to intestinal pathology like polyp, Meckel's diverticulum, submucosal lipoma or tumour. Ileo-colic invagination is the commonest variety, can lead to an ischemic segment and requires surgery. A sausage-shaped lump concavity towards the umbilicus is the characteristic physical sign of intussusception. Radiography usually shows features of small or large bowel obstruction. CT scan of the abdomen or barium study is also helpful.

CASE REPORT
A 60-year-old female presented with the complaint of a swelling in the right inguinal region for 4 months which was about 5x4cm in size, oval in shape, reducible, non-tender, with impulse on coughing. The swelling was above and lateral to the pubic tubercle. There was also history of a small ulcer lateral to this swelling from which daily about 50 ml greenish discharge drained.

The patient's vital parameters were normal. On abdominal examination, there was no tenderness or guarding. There was no sign or symptom of obstruction or peritonitis. Other systemic examinations were normal. Ultrasonography, X-ray of the abdomen standing and blood investigation were normal on admission.

The patient was treated conservatively. After 5 days of admission, she had few bouts of cough and there was burst of the inguinal hernia with protrusion of bowel. The protruded bowel was irreducible with signs of obstruction.
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Figure 1
Figure 1: Burst obstructed right inguinal hernia with protruding bowel

The patient was taken for laparotomy urgently. On exploring the peritoneal cavity, a loop of ileum about 1 foot proximal from the ileo-caecal junction was adherent to the deep inguinal ring through which it was protruding outside. Adhesions were removed and the whole obstructed segment was reduced from the deep inguinal ring. On examination of the obstructed bowel, ileo-ilcal intussusception with perforation was found.

We reduced the intussusception, performed resection of a small ileal segment and end to end anastomosis. The deep inguinal ring was closed intraabdominally. Midline incision and right inguinal wound were closed in layers.

DISCUSSION

The earliest record of inguinal hernia dates back to approximately 1500 BC. The ancient Greeks were well aware of inguinal hernias and the term derives from the Greek word meaning an offshoot, a bulging or bulge. The Latin word hernia means a rupture or tear.

Inguinal hernia is a very common surgical problem all over world. It can occur in all age groups and in both sexes with many usual and unusual presentations. It may present as an emergency as in strangulating hernia requiring urgent treatment. (1, 2)

The hernia sac may contain omentum, intestine, a portion of circumference of intestine (Richter's hernia), a portion of bladder (which may constitute part of or be the sole contents of a direct inguinal hernia), a sliding hernia, ovary with or without fallopian tube, a Meckel's diverticulum (Littre's hernia) or two loops of intestine in the manner of a ‘W' (Maydl's hernia). (3)

Various techniques are described for repair of inguinal hernia like pure tissue repair, prosthetic repairs, mixed tissue and prosthetic repair, preperitoneal repairs and laparoscopic repairs.

Guy de Chauliac, in 1363, differentiated between inguinal and femoral hernia and described the technique of reduction for strangulation. In 1556, Franco illustrated the use of a grooved director to cut the strangulating neck of the hernia while avoiding the bowel.

This case report highlights the need for an early and accurate diagnosis followed by prompt treatment of groin swelling. The delay in its diagnosis and management may result in various complications. The principle of early referral and repair of inguinal hernias is the key for prevention of this complication as well as the associated morbidity and mortality. (4, 5) This unusual and rare complication should be considered as an eye opener for the concerned authorities to improve the existing health care system.

CONCLUSION

Obstructed inguinal hernia with ileo-ileal intussusception as hernia content is a very rare condition requiring accurate diagnosis and early treatment. Surgery is the treatment of choice.

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