



CLINICAL SERIES OF UNUSUAL PRESENTATION OF OBSTRUCTED HERNIAS

General Surgery

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ABSTRACT

The strangulated inguinal hernia is one of the most common emergencies in surgery. Usually the narrow internal inguinal ring or the external inguinal ring is the site of constriction of the viscus, which forms the content of the hernia resulting in strangulation. Although the Diagnosis is usually made by physical examination, the content of the hernia sac and the extent of the following operation may vary. We present you 4 different cases of obstructed hernia & their outcome

KEYWORDS

INTRODUCTION:

Seventy-five percent of all abdominal wall hernias are found in the groin, making it the most common location for an abdominal wall hernia [1]. It is estimated that 75% of all hernias occur in the inguinal region. The most serious complication of a hernia is strangulation, which occurs in approximately 1–3% of groin hernias. [2] It is the most common cause of intestinal obstruction in all age groups. Usually the narrow internal inguinal ring or the external inguinal ring is the site of constriction of the viscus, which forms the content of the hernia resulting in strangulation. The sac of an inguinal hernia most frequently contains the intestine and the omentum and uncommonly the appendix, the Meckel diverticulum, the ovary or the urinary bladder. Except in sliding hernia, the sigmoid colon is uncommonly found in an inguinal hernia, especially on the right side.[3] Femoral hernias occur just below inguinal ligament and are more risk for obstruction.

CASE REPORTS:

- A 40yr old male presented to emergency ward with complaints of pain & swelling in right groin & scrotum since 3days, patient gives history of sudden increase in swelling since 3days & irreducible. Patient is known case right inguinal hernia since 3years. Patient gives history of loose stools since 2days

On physical examination the abdomen was moderately distended, the bowel sounds were diminished and there was a mild diffuse tenderness without peritoneal signs. In the right inguinal region there was a large, tender, irreducible hernia. His body temperature was 37°C. The laboratory tests showed mild leukocytosis. The plain abdominal X-ray showed marked dilatation of the small bowel with air fluid levels (Fig. 1). This finding was inconsistent with the typical irreducible right inguinal hernia, where the small intestine is expected to be contained and affected in the hernia sac. For that reason and in order to exclude concomitant colon pathology, a ULTRASONOGRAPHY scan was ordered. The abdominal ultrasonography revealed that the content of the right inguinal hernia was the strangulated omentum & bowel loops



Fig.1

Patient was taken for emergency surgery & patient was operated through J- shaped incision In right inguinoscrotal region, right indirect inguinal hernia was noted & sac contents were ascending colon, caecum, appendix & gangrenous small bowel segment, incision was extended bowel loop traced 15-20cm from IC junction gangrenous bowel segment was noted, gangrenous bowel segment was resected and ileostomy was done. Surgery was uneventful, later after 6weeks ileostomy closure was done. Patient is now vitally stable & fit.



- A 40yr old male presented to emergency ward with complaints of pain & swelling in right groin & scrotum since 3days, pain in abdomen & vomiting since 2days. And not passing stools since 2days

On physical examination the abdomen was moderately distended, the bowel sounds were diminished and there was a diffuse tenderness and guarding. In the right inguinal region there was a large, tender, irreducible hernia. On X-ray finding dilated small bowel with air fluid level seen, ultrasonography was done, which showed right inguinoscrotal hernia with omentum as content



Patient was taken for emergency operation & right inguinal incision was taken, gangrenous omentum & bowel loop was seen in sac.

Incision was extended laterally and omentum & bowel traced, gangrenous omentum was resected and bowel loop showed impending perforation 20cm from IC junction, resection & anastomosis done. Surgery was uneventful & patient is vitally stable.



- A 58yr old male male presented to emergency ward with complaints of pain & swelling in left groin & scrotum since 3days & vomiting since 2days

On physical examination the abdomen was moderately distended, the bowel sounds were present and there was a diffuse tenderness in abdomen. In the left inguinal region there was a large, tender, irreducible hernia. On X-ray finding no significant changes was seen, ultrasonography was done , which showed left inguinoscrotal hernia with omentum and bowel as content

Patient was taken for emergency surgery & left inguinal incision was taken, omentum was seen in sac. Incision was extended laterally and omentum traced , omentum was resected & left inguinal herniorrhaphy was done . Surgery was uneventful & patient is vitally stable.



- A 45yr old female presented to emergency ward with complaints of pain abdomen, vomiting & not passing stools since 1week

On physical examination the abdomen was moderately distended, the bowel sounds were absent and there was a diffuse tenderness and guarding in abdomen. Patient was a known case of severe kyphoscoliosis . On X-ray finding dilated large bowel & multiple air-fluid changes was seen, ultrasonography and CECT was done, which showed obstructed left inguinal hernia with herniation of proximal ileal loopthrough defect of 1.1cm in deep inguinal ring. The herniated bowel loops show edematous wall with normal enhancement with distal ileal & large bowel appear collapsed.

Patient taken for emergency surgery & midline infraumbilical incision taken & bowel traced 20cm from IC junction Ileal bowel loop was obstructed in left femoral ring inferior to left inguinal ligament. Bowel was released & gangrenous change was seen & resection & anastomosis done, & femoral hernia defect was repaired through separate incision via left inguinal region. Surgery was uneventfull



DISCUSSION:

Seventy-five percent of all abdominal wall hernias are found in the groin, making it the most common location for an abdominal wall hernia [1]. It is estimated that 75% of all hernias occur in the inguinal region. Groin hernias are generally classified as inguinal (indirect and direct) and femoral based on the site of herniation relative to surrounding structures. Indirect hernias protrude lateral to the inferior epigastric vessels, through the deep inguinal ring. Direct hernias protrude medial to the inferior epigastric vessels, within Hesselbach's triangle.[4]

Incarceration of inguinal hernia occurs in approximately 10% of cases which in turn can lead to intestinal obstruction, strangulation and infarction.[5] Among these complications, strangulation is the most serious with potentially lethal sequelae.[6]

The content of inguinal hernias varies widely. In most cases small intestine and omentum are usually contained in the hernia sac, but urinary bladder, fallopian tube with the ovary, Meckel's diverticulum, appendix and inflamed colonic diverticulum have also been reported.[7–12]. Nevertheless, anyone presenting with clinical features of strangulated inguinal hernia with small bowel obstruction mandates prompt surgical exploration of the inguinal canal as was done in our case. Most of the times, small bowel resection can be performed safely through the inguinal incision if the viability of the necessary extent of the bowel could be assessed in a satisfactory manner.

CONCLUSION:

Hernia is common clinical pathology seen in daily practice. They are at risk for strangulation due to tight constriction band near deep inguinal or superficial inguinal ring, but other causes for strangulation should also be in mind like omental bands, adhesions hence proper investigation methods like ultrasonography and CT scan are required for early diagnosis and proper management. Time period of irreducibility, hospital admission, diagnosis and intervention plays important role managing obstructed hernia.

REFERENCES:

1. Beauchamp CM, Ever BM, Mattox KL. Sabiston Textbook of Surgery: The biological basis of Modern Surgical Practice, 19ed. vol-2. Philadelphia: Saunders; 2012. p. 1114.
2. Malangoni MA, Rosen MJ. Hernias. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston textbook of surgery. 18th ed. Philadelphia: Saunders Elsevier; 2008. p. 1155–79.
3. Tufnell MLA, Abraham-Igwe C. A perforated diverticulum of the sigmoid colon found within a strangulated inguinal hernia. *Hernia* 2008;12:421–3.
4. Brunicaudi FC, Andersen DK, Billiar TR, et al. Schwartz's Principles Of Surgery, 10ed. New York: McGraw Hill Education; 2014. p. 1496.
5. McFadyen BV, Mathis CR. Inguinal herniorrhaphy: complications and recurrences. *Semin Laparosc Surg* 1994;1:128–40.

6. Gallegos NC, Dawson J, Jarvis M, Hobsely M. Risk of strangulation in groin hernias. *Br J Surg* 1991;78:1171-3.
7. Fuexer F, Brunner P, Cucchi JM, Mourou MY, Bruneton JN. Inguinal herniation of a bladder diverticulum. *Clin Imaging* 2006;30:354-6.
8. George EK, Oudesluys-Murphy AM, Madern GC, Cleyndert P, Blomjous JG. Inguinal hernias containing the uterus, fallopian tube, and ovary in premature female infants. *J Pediatr* 2000;136:696-8.
9. Ravikumar K, Khope S, Ganapathi BP. Littre's hernia in a child—an operative surprise (a case report). *J Postgrad Med* 1989;35:112-3.
10. Orr KB. Perforated appendix in an inguinal hernial sac: Amyand's hernia. *Med J Aust* 1993;159:762-3.
11. Kouraklis G, Kouskos E, Glivanou A, Raftopoulos J, Karatzas G. Perforated carcinoma of the sigmoid colon in an incarcerated inguinal hernia: report of a case. *Surg Today* 2003;33:707-8.
12. Yahchouchy-Chouillard EK, Aura TA, Lopez YN, Limot O, Fingerhut AL. Transverse colon diverticulitis simulating inguinal hernia strangulation: a first report. *Dig Surg* 2002;19:408-9.