ORIGINAL RESEARCH PAPER

Volume-8 | Issue-5 | May-2019 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

LAPAROSCOPIC MANAGEMENT OF RETROCECAL HERNIA CAUSING SMALL BOWEL OBSTRUCTION - A CASE REPORT

General Surgery

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ABSTRACT

Internal hernia (IH) occurs rarely, but frequently present in association with small bowel obstruction or strangulation. Clinical presentation is nonspecific and diagnosis is difficult, but untreated cases are potentially life threatening with high morbidity and mortality. We present a case of 30 year female presented with symptoms of acute small intestinal obstruction. After initial evaluation and CECT abdomen, diagnostic laparoscopy was done, which revealed congested loops of small bowel herniating into the retrocecal space. Reduction of the herniated bowel loops, appendicectomy with opening of the retrocecal hernia defect was done. Literature review entails rarity of retrocecal subtype of pericecal IH and very few reports of laparoscopic managements of the associated small bowel obstruction.

KEYWORDS

Internal hernia, Retrocecal hernia, Small bowel obstruction, CT Scan

Introduction

IH is defined as protrusion of the abdominal viscera into the congenital recesses, fossae or foramina, or acquired defects following previous trauma, surgery or inflammatory conditions within the abdomen and pelvic cavity. It is a rare condition with a reported incidence of between 0.2 and 0.9% and is the cause of small bowel obstruction in 0.6 to 5.8% of the cases [1]. The classification of IH based on origin and topographical distribution includes paraduodenal (53%), pericecal (13%), foramen of Winslow (8%), transmesenteric and transmesocolic (8%), intersigmoid (6%) and retroanastomotic (5%) [2]. It has no sex or age predilection. Congenital internal hernia are either retroperitoneal or formed from congenital anomalous opening lacking a true peritoneal sac. The acquired IH occur secondarily through a postsurgical, especially surgery for obesity, Roux-en-Y bypass procedures, liver transplants or traumatic or post inflammatory defect inside the peritoneal cavity and are now increasingly noticed. Clinical presentation is often nonspecific with late diagnosis leading to bowel strangulation with an overall mortality greater than 50% [3]. Here we describe the laparoscopic management of a retrocecal subtype of pericecal IH in a 30 year female presenting as acute small intestinal obstruction.

Case Presentation

A 30 year female, admitted in the emergency department of our hospital with the complain of acute pain abdomen, vomiting and constipation for 2 days. On examination abdomen was distended and tenderness in the lower abdomen more marked on the right .General examination revealed no abnormality. Patient was afebrile, vital parameters were within the normal limit except mild tachycardia with dehydration. Patient was resuscitated with correction of dehydration, NG tube, IV antibiotics and symptomatic medications. Plain X-ray abdomen revealed few dilated bowel loops with air fluid level in right lower abdomen. Ultrasound abdomen showed dilated small bowel loops with sluggish peristalsis and intrauterine gestational sac of 6-7 wks. Patient was informed about pregnancy with the emergency condition and NCCT abdomen confirmed the dilated jejunum and proximal ileum with collapse of distal ileum.

The patient was planned for emergency diagnostic laparoscopy in view of persistent intestinal obstruction and fear of strangulation. Diagnostic laparoscopy showed multiple dilated small bowel loops with internal herniation of a loop of terminal ileum into the retrocecal space [Fig.1] with collapse of distal ileal segment. The herniated terminal ileal loops were reduced laparoscopically, the small retrocecal hernia defect was opened up and appendicectomy done. The patient recovered well in the postoperative period, started oral liquids on 3rd day and discharged on 5th day. On follow up at 3 months, patient was normal without any GI symptoms.

Discussion

Embryologically four different pericecal recesses formed by folds of peritoneum are, the superior ileocecal recess, inferior ileocecal recess, retrocecal recess, and paracecal sulci [4]. The retrocecal recess, the largest of the four recesses, is bounded anteriorly by the posterior wall of the cecum, posteriorly by the posterior abdominal wall like this present case.

Most of the patients are asymptomatic or present with repeated bouts of sub acute intestinal obstruction. It often reduces spontaneously and ignored as nonspecific pain abdomen. The most frequent herniated organ is small bowel and symptoms severity depends on the duration, reducibility of hernia and presence or absence of incarceration and strangulations [5]. Nonspecific clinical presentation often poses a diagnostic challenge preoperatively and the ensuing delay, leading to bowel ischemia, gangrene and perforation.

Imaging techniques that are helpful for the diagnosis of IH are - Plain X-ray abdomen, USG, Abdominal CT scan. Contrast enhanced CT(CECT) scan and more specifically multidetector CT (MDCT) abdomen is the imaging study of choice in the evaluation of any type of IH, particularly in the setting of intestinal obstruction. The characteristics CT findings are sac like mass/cluster of dilated bowel loops in abnormal location, twisted, engorged and stretched mesenteric vascular pedicle and converging vessels at the hernia orifice [6].GI studies enhanced with intra luminal contrast (Ba enhanced studies, enteroclysis) are other useful investigation, but is not used and has limitations in emergency.

Diagnosis of IH is difficult due to non specific clinical presentation. Hence a high index of suspicion and prompt radiological evaluation by CECT or preferably MDCT as investigation of choice and timely exploration of the abdomen reduces morbidity and mortality. Early intervention is the key to successful management and in a preoperatively diagnosed case, laparoscopic or laparoscopic assisted procedure by experienced surgeon is further helpful in reducing morbidity and attaining early recovery. In our present case with acute intestinal obstruction, laparoscopic management of the IH was done successfully.

Conclusion

Internal hernia as a cause of small bowel obstruction should always be kept in mind particularly in patients without any previous surgery. A high index of clinical suspicion with CECT or MDCT scan of abdomen helps in arriving in correct preoperative diagnosis. Timely intervention

should be carried out to prevent morbidity and mortality associated with these cases.

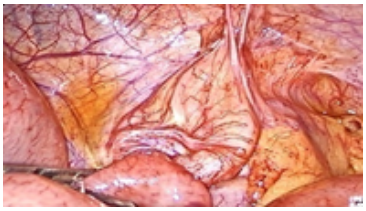

Fig 1.Terminal ileal loops herniating into retrocecal space

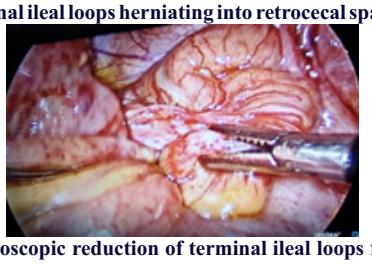

Fig.2 Laparoscopic reduction of terminal ileal loops from hernia sac

REFERENCES

1. E.J.Jang,S.H.Cho and D.D.Kim, "A case of small bowel obstruction due to a paracecal hernia",Journal of the Korean Society of Coloproctology, vol 27,no. 1,pp.41-43,2011
2. Meyers MA. Dynamic radiology of the abdomen : Normal and pathologic anatomy. 4th ed. New York, NY: Springer-Verlag; 1994.
3. A.Rae, A.Kalyanraman, A.ward,and A.Harikrishnan, "An interesting case of retrocecal internal herniation causing small bowel obstruction," Annals of Medicine and Surgery,2015
4. Lu HC, Wang J, Tsang YM, Tseng HS, Li YW. Pericecal hernia: a report of two cases and survey of the literature. Clin Radiol 2002; 57:855–858.
5. Y. Narjis and B. Finech, "Primitive internal hernia in adult: a report on 6 cases, "Surgery: current Research, vol.5, article 235, 2015.
6. N. Takeyama, T. Gokan, Y. Ohgiya et al., "CT of internal hernias, "Radiographics, vol.25 no.4 ,pp.997–1015,2005.