



OBSTRUCTED SPIGELIAN HERNIA IN THE LEFT LOWER ABDOMINAL QUADRANT : A CASE REPORT

General Surgery

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ABSTRACT

Spigelian Hernia is an uncommon lateral ventral hernia. Majority of Spigelian Hernias are reported in spigelian belt. Here, we report a case of Spigelian Hernia in the left lower quadrant of abdominal wall. A 25 year old female with complain of abdominal pain and a mass in left lower quadrant for 3 months which was small in size initially but enlarges in size in the past 15 days. Contrast Enhanced Computed Tomography (CECT) of abdomen showed herniation of jejunal loop forming closed loop causing small bowel obstruction, suggested obstructed ventral hernia. There was no history of trauma, pregnancy, or previous surgery, surgeons considered it was a spontaneous hernia. Emergency laprotomy done. After laprotomy, diagnosis of obstructed Spigelian Hernia with jejunum and omentum in left lower abdominal wall confirmed. The gangrenous jejunum and omentum resected out and double barrel jejunostomy done. The defect was repaired by interrupted sutures by suturing rectus muscle with obliques and transverse abdominis. She was discharged from hospital after 10 days and recovered uneventful.

KEYWORDS

Spigelian Hernias, left iliac fossa mass, obstructed heria, ventral hernia

INTRODUCTION

Fig.1- A lump in the left iliac fossa Spigelian hernia is a rare variety of ventral abdominal hernia which is defined as herniation of abdominal content or peritonium through the defect in spigelian fascia [1] which is located between semilunar line and lateral edge of rectus abdominis muscle. The semilunar line defined as the transition of the transversus abdominis muscle to its aponeurotic tendons [2]. The semilunar line was first described by Adriaan Van Spieghel, a Flemish anatomist in 1645 [3]. It is very uncommon hernia and accounts for only 2% of all hernias [4]. It is very difficult to diagnose as hernial sac located between layers of muscle but it may be palpable as lump if the content is more enough. It may occur anywhere on spigelian fascia from upper quadrant to lower quadrant of abdominal wall but more in spigelian belt which is a transverse wide zone in lower abdomen below the level of umbilicus [5]. Diagnosis can be made with help of ultrasound and abdominal computed tomography (CT) scan. We report a case of female patient presenting with left lower abdomen pain and palpable mass which diagnosed as a case of obstructed Spigelian Hernia. Fig.1



Case presentation

A 25 year old female presented with complain of pain abdomen in left lower abdomen for 15 days with no complain of nausea or vomiting. She also presented with a lump in the left lower quadrant of abdomen for 3 months which was initially small but enlarged in the past 15 days. On

examination, abdomen was soft, palpable mass on the left lower quadrant of abdomen of size 15×15 cm, mobile, firm in consistency, margin ill defined, surface smooth, mild tender. Contrast Enhanced Computed Tomography (CECT) of abdomen performed which

showed defect in abdominal wall in left iliac fossa region through which jejunum loop along with its mesentery was herniated out forming a closed loop, soft tissue stranding in omentum/mesenteric fat and minimal collection in hernial sac. This suggested obstructed ventral hernia in left iliac fossa. (fig.2).



Fig 2-CECT abdomen shows a defect in left lower abdominal wall through which jejunum loop herniated out.

There was no history of trauma, surgery, pregnancy, COPD therefore, surgeons considered it was a spontaneous ventral hernia. As the features suggested obstruction, emergency surgery was performed. Intraoperatively, about 1 feet of jejunum loop along with omentum was herniated in the sac through defect of size 2×1 cm (fig.3).

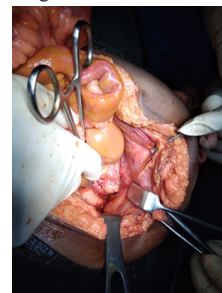


Fig.3- jejunal loop herniated through a defect lateral to left rectus muscle

DISCUSSION

Spigelian hernia is a rare ventral hernia, defined as herniation of abdominal content and peritonium through defect in spigelian fascia. It can occur anywhere on the semilunar line mostly below the level of

umbilicus i.e spigelian belt, which is wide transverse region in lower abdominal wall. Rarely occur on upper quadrant as spigelian fascia is stronger therefore to posterior rectus sheath [1]. Predisposing factors are Chronic Obstructive Pulmonary Disease (COPD), obesity, trauma, peritoneal dialysis, pregnancy. Mostly occur between 40 to 70 yrs of age with female predominance as M:F ratio is 1:1.18 [6].

Mostly patients presents with swelling in lower abdomen along with sharp pain and tenderness. On physical examination, it is very difficult to diagnose as the hernia is usually small in size and located between the layers of abdominal muscle. therefore radiological help required. Ultrasound is first line of investigation and CT scan is investigation of choice [7]. Beside this, only 50% of cases are correctly diagnosed pre-operatively [6].

The defect of Spigelian Hernias are small so the risk of obstruction, strangulation are very high, so early surgical repair should be done. Surgical repair can be open or laproscopic depend on patient condition, complication, defect size. Repair of the defect can be done by fascial suturing with or without mesh reinforcement [8]. In uncomplicated cases laproscopic procedure can be performed [9]. In our case, we performed open surgery as there was obstruction.

In conclusion, a mass in left iliac fossa may suggest a Spigelian Hernia. Though it is a rare condition but can be easily diagnosed with the help of imaging modalities. Because there is high risk of obstruction, strangulation, prompt and appropriate action should be taken immediately i.e surgical repair of hernia that can be open or laproscopic repair.

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