



A Rare Case of Sliding Spigelian Hernia

KEYWORDS

Spigelian hernia, semilunar line, sigmoid colon, prolene mesh

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ABSTRACT

The spigelian hernia (SH) is very uncommon and occurs through semilunar line named after Belgium surgeon Adrian Van der Spiegel. This line is about 6 cm below umbilicus and to the side of the abdominal muscles. That to incidence of this hernia may be greater than actual incidence of 1% because failure to recognize the clinical symptoms. We are reporting one case of spigelian hernia because it is presented only with symptoms of pain abdomen. If it is not detected early, that can lead to incarceration with or without intestinal obstruction. Pain abdomen can be severe by increasing the abdominal pressure and relived by rest. Most of the time, it is missed. It is only diagnose by thorough examination of clinical findings and judicious use of imaging study like USG and CT scan of abdominal pelvis, which leads to increased detection of this type of hernia. Ultimately and more over proper management of the patient can be done.

INTRODUCTION

Spigelian hernias are a rare variety of abdominal wall hernias that account for less than 1% of all hernias in the adult population (Mittal et al., 2008). They are known to occur at a level referred to as spigelian hernia belt which is a transverse band between the level of umbilicus and a line joining both the anterior superior iliac spines. They are more common in women with a peak occurrence around 50 years (Moreno-Egea et al., 2002). The symptoms vary from a well localized constant abdominal pain with or without a vague palpable lump, inconsistent ache. Clinically it is difficult to feel a bulge or a hernia defect as they are sub muscular (Bittner et al, 2008; Tarnoff et al, 2002; Chowbey et al, 2000). The chances of obstruction are relatively less in SHs. often a part of the bowel most commonly a part of the sigmoid colon wall forms a part of the sac, which makes it a sliding variety. Hence one has to be very careful while dealing with the sac and its contents during surgery. Because of this and its location diagnosis is difficult. We report a case of a Spigelian hernia which was of a sliding variety and its surgical management at our institution

CASE REPORT

A 51 year old male, a farmer, was admitted with dull aching pain abdomen and an indistinct bulge on the left lower abdomen noticed by him since 3 months (Fig-1). Apart from the above he was clinically and biochemically normal.

The bulge imparted a slight increase in prominence on coughing was located over the left lower abdomen below the umbilicus and lateral to the outer boarder of left rectus. His ultrasound did not reveal any abnormality but CT abdomen revealed spigelian hernia (Fig-2). His condition was diagnosed as a spigelian hernia and planned for surgery. Approach was through a transverse incision starting from the lateral border of the rectus till about 8 cm. laterally. The muscles were separated in line of their fibers. The hernia sac was visible and dissected from the surrounding structures. On opening the hernia sac the posterior wall was found to be of the sigmoid colon. The colon was carefully dissected from the peritoneum and reposed in to the abdominal cavity (Fig-3). The hernia sac was closed and muscles reposed. The prolene mesh was placed

and fixed and a suction drain given (Fig-4). The patient was kept on I.V fluids for 2 days then allowed oral intake. The drain removed after 4 days. He was discharged on 9th post operative day after removal of stitches.

DISCUSSION

Spigelian hernia may be related to stretching in the abdominal wall caused by obesity, multiple pregnancies, previous surgery or scarring (Mittal et al., 2008). It can be congenital or acquired. Spigelian hernias are very uncommon and constitute only 0.12% of all abdominal wall hernias (Mittal et al., 2008; Tarnoff et al, 2002; Moreno-Egea et al., 2002). The male to female ratio is 1:1.18. The diagnosis of a spigelian hernia is difficult; few surgeons suspect it, it has no characteristic symptoms, and the hernia may be interparietal with no obvious mass on inspection or palpation. Only 50% of cases are diagnosed preoperatively (Mittal et al., 2008). It may present as a swelling adjacent to the iliac crest. The patient may have a classic lump when he/she stands up. The lump is painful if the patient stretches and disappears on lying down. Sometimes the local discomfort can be confused with peptic ulceration. Rarely the hernia can enter the rectus sheath and can be confused with spontaneous rupture of rectus muscle or with a hematoma in the rectus sheath (Rogers and Camp, 2001). Spigelian hernias are treacherous and have a real risk of strangulation. The risk of strangulation is higher because of sharp fascial margin around the defect. Richter type of hernia has also been reported to occur with spigelian hernia. For this reason, surgery should be advised in all patients.

For spigelian hernia, either by open technique or by laparoscopically surgery can be performed. There have been multiple reports of successful management of spigelian hernia by laparoscopy (Majeski, 2009; Bittner et al., 2008). In this report, mesh is placed extraperitoneally, which decreases the cost of procedure, also, incidence of complications like intestinal obstruction and fistulization of bowel is expected to decrease (Mittal et al., 2008).

CONCLUSION

As spigelian hernia is difficult to diagnose through various

imaging modalities, for that a thorough knowledge of clinical diagnosis require to overcome the strangulation of the disease.

Conflict of Interest

There is nothing to declare for the conflict. Patient consent has been taken before to paper writing.

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Fig-1, Patient having spigelian hernia



Fig-2, CT scan of defect in linea semilunaris

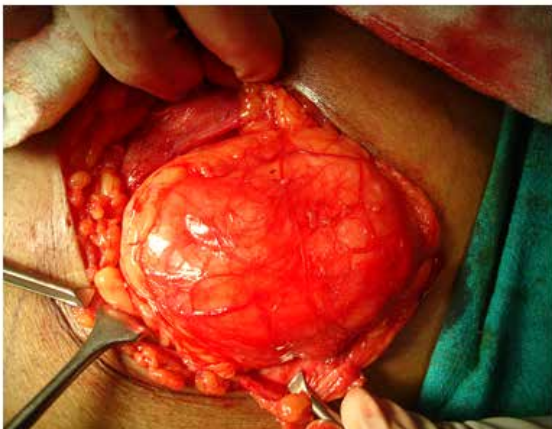


Fig-3, Dissection of hernia sac with omental content



Fig-4, Defect is covered with prolene mesh, wound closed in layers after application of suction drain.

REFERENCE

1. Mittal T, Kumar V, Khullar R, Sharma A, Soni V, Bajjal M, et al. Diagnosis and management of Spigelian hernia: A review of literature and our experience. *J Min Access Surg.* 2008; 4:95-8. | 2. Bittner JG, Edwards MA, Shah MB, MacFadyen BV, Jr, Mellinger JD. Mesh-free laparoscopic Spigelian hernia repair. *Am Surg.* 2008; 74:713-20. | 3. Chowbey PK, Sharma A, Khullar R, Bajjal M, Vashistha A. Laparoscopic ventral hernia repair. *J Laparoendosc Adv Surg Tech.* 2000; 10:79-84. | 4. Tarnoff M, Rosen M, Brody F. Planned totally extraperitoneal laparoscopic Spigelian hernia repair. *Surg Endosc.* 2002; 16:359. | 5. Moreno-Egea A, Aguayo JL, Girela E. Treatment of spigelian hernia using totally extraperitoneal laparoscopy ambulatory surgery. *Surg Endosc.* 2002; 16:1806. | 6. Rogers FB, Camp PC. A strangulated Spigelian hernia mimicking diverticulitis. *Hernia.* 2001; 5:51-2. | 7. Moreno-Egea A, Carrasco L, Girela E, Martin JG, Aguayo JL, Canteras M. Open vs. laparoscopic repair of spigelian hernia: A prospective randomized trial. *Arch Surg.* 2002; 137:1266-8. | 8. Majeski J. Open and laparoscopic repair of spigelian hernia. *Int surg.* 2009; 94(4): 365-9. |