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General Surgery

RIGHT SIDED SPIGELIAN HERNIA: A RARE ENTITY

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ABSTRACT Spigelian hernia a rare clinical entity, is difficult to diagnose clinically as the presentation is often vague pain in abdomen with or without a mass. Also, there is no standardized investigation for a definite diagnosis, and further because of its rarity, no large series are available for comparing different treatment modalities. Such a rare case of right sided spigelian hernia in a female patient is being presented.

KEYWORDS : Spigelian hernia, abdominal wall hernia.

INTRODUCTION

Spigelian hernia is a rare abdominal hernia, occurring through the spigelian aponeurosiis.[1] Named after Adrian Van Den Spigehel, an anatomist from Belgium who described the fascial defects associated with this hernia.[2] As their clinical presentation is often vague pain in abdomen with or without a mass or with a very small lump, radiological diagnostic tests including ultrasonography (USG), Computerized Tomography scan (CT-SCAN), are not 100% sensitive leading to a delayed diagnosis. Left sided Spigellian hernia are more common.[3] It carries a significant risk of incarceration and strangulation. Spigellian hernia have been repaired by both conventional and laparoscopic approaches. We present a case of right sided Spigelian hernia in a female patient, and its management.

CASE STUDY

A 36 years old female patient presented with a painful swelling in right side of her lower abdomen for the last 5 days, She had noticed similar lump appearing on & off in her right lower abdomen on several occasions since 5 years which was brought on during manual work or excessive coughing each time associated with pain. But on all occasions patient was relieved of pain on resting in supine posture, and also patient noted disappearance of the swelling too. But the present episode lasted for 5 days. Pain and swelling did not subside, during which swelling became non-reducible and pain worsened requiring her to seek medical attention.

On examination – there was a firm, non-reducible, tender mass of size 3x2 cm, with some mobility in horizontal direction. A provisional diagnosis of Spigelian hernia was made and the patient was subjected to USG, the findings of which were suggestive of Spigelian hernia. After confirmation of diagnosis, the surgery was planned under general anaesthesia. A horizontal incision was made centered on the mass, division of skin and subcutaneous fat revealed a intact external oblique aponeurosis which on opening revealed a hernia sac of size of a 5x6 cm covered with preperitoneal fat protruding through a triangular defect at the lateral border of rectus muscle at the level of anterior superior iliac spine (ASIS). Sac was opened at the fundus which revealed part of omentum which could not be pushed back in to the abdomen, hence it was partly excised and rest of it was replaced back in to the peritoneal cavity.

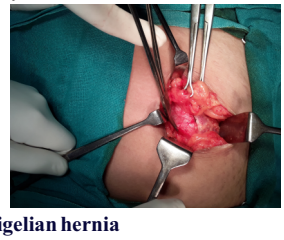

Figure 1: Sac of Spigelian hernia

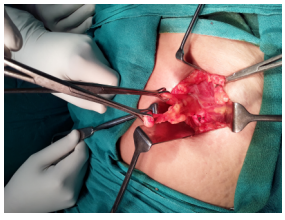

Figure 2: contents of Spigelian hernia

Defect was closed with non-absorbable polypropylene suture and a mesh was placed over it. External oblique aponeurosis and skin was closed. Post – op period was uneventful and patient was discharged on second post-operative day. Patient was followed up for a year, during which she was found to be completely asymptomatic without any complications or recurrence.

DISCUSSION

Spigelian hernia is rare, and represents 0.1-2% of all abdominal wall hernias.[4] Spigelian hernia is the protrusion of a peritoneal sac or organ, or of preperitoneal fat, through a congenital or acquired defect in Spiegel's aponeurosis.[5] Spiegel's aponeurosis is located between the semilunar line and the external edge of the muscle.[6] Most of the Spigelian hernias occur in an area 6cms above the ASIS, weakest area in the aponeurosis is at the level of semicircular line (arcuate line of Douglas), due to splitting of the fascias of oblique and transversus muscle to form two separate layers.[2] Acquired factors that predispose to a spigelian hernia include obesity, multiple previous pregnancies, chronic obstructive pulmonary disease and previous surgeries.[2] The mean age of presentation is 60-63 years. Spigelian hernia has been found more commonly in females and on left side.[3] in present case, the Spigelian hernia was found on right side. In most series difficulty was noticed in the diagnosis of the hernia.[1-4] In a study conducted by Vas and Schellinger, interval between onset of symptoms and diagnosis varied from 2 days to 6 years.[4] Diagnosis on basis of history and clinical examination fails in most cases especially in small hernias, or sacs progressing in a caudolateral direction taking it outside Spigelian zone, another contributing feature for difficulty is in most cases the overlying external obique is not breached.[2,3] Extreme difficulty is noted when hernia is small and not palpable especially in obese patients.[3] Although not 100% sensitive CT-SCAN is better than USG in doubtful cases.[2] In our case as USG revealed a spigelian hernia and CT-SCAN was not ordered.

The management of Spigelian hernias is almost always surgical, with a low recurrence rate after surgical repair.[2,7] Elective repair of uncomplicated Spigelian hernias can be performed both laparoscopically or by an open technique, with the former reported to be associated with a lower morbidity and shorter hospital stay.[8]

However, an open approach is more feasible in emergent presentations which is associated with risk of viscus incarceration, as this prevents undue delay and rapid reduction with possible revival of ischemic tissues. In our patient, an open approach to the hernia allowed optimal exposure in a timely fashion.

CONCLUSIONS

Spigelian hernia, a rare abdominal wall hernia, occurs more commonly in females and on left side. Right sided Spigelian hernia is even rarer which was encountered in present case. The diagnosis of this entity is difficult as presentation is often vague pain in abdomen with or without lump. The management of Spigelian hernias is almost always surgical so as to prevent incarceration.

REFERENCES

[1] SpangenL.Spigelianhernia.world J Surg. 1989;sep-oct;13(5):573-80.
[2] Larson DW, Farley DR. spigelian hernias: repair and outcome for 81 patients. World J Surg 2002oct;26(10):1277-1281.
[3] MolesMorenilla L, DocoboDurantez F, Mena Robles J, de Quinta Frutos R. Spigelian hernia in spain. An analysis of 162 cases.RevEspEnferm Dig 2005;97:338-347.
[4] Vara R, Rosell J, GuerreroJA, RuizA. Hernias externas simples y complicades de la pared abdominal del adulto: 1635 casos. Cirugea Ibero-Americana 1993;2:58-64.
[5] Skandalakis LJ, Gadacz TR, Mansberger AR Jr, Mitchell WE Jr, Colborn GL, Skandalakis JE. Spigelian (lateral ventral) hernia. En: Modern hernia repair. The embryological and anatomical basis of surgery. Carnforth: Parthenon Publishing group, 1996. P. 71-4.
[6] Pichi M, Pacifico G, Landi L, Corsi A, Rizzo DM, Senesi S, et al. L ernia di Spigelio. Considerazioni anatomo-cliniche. Minerva Chir 1999; 54:425-31.
[7] Vos DI, Scheltinga MR. Incidence and outcome of surgical repair of Spigelian hernia. Br J Surg. 2004; 91: 640-4.
[8] 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.