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RARE CASE OF SPIGELIAN HERNIA: A CASE REPORT

Dr.Nisha Naaz Siddiqui¹, Dr.Aeliya Rukhsar¹ Prof. Saiyad Shah Alam²

¹PG Scholar, Dept. of General surgery, National Institute of Unani Medicine, Bangalore, Karnataka, India

¹PG Scholar, Dept. of General surgery, National Institute of Unani Medicine, Bangalore, Karnataka, India

²HOD, Dept. of General surgery, National Institute of Unani Medicine, Bangalore, Karnataka, India

Abstract

Spigelian hernias are abdominal hernia that occur at the semilunar line lateral to the rectus abdominis muscle. Spigelian hernia is exceedingly rare with an incidence ranging from 0.12-0.2% of all abdominal wall hernia. It is asymptomatic in 90% of cases and generally, difficult to diagnose due to their location and vague symptoms. The most common complication is hernia strangulation. The confirmatory diagnosis has been based on the ultrasonography and Computed Tomography. Once diagnosed operative management is indicated due to risk of incarceration. We report a case of 48 years old female patient who presented with swelling in the right iliac fossa associated with intermittent pain. A diagnosis of Spigelian hernia was made. The patient underwent open hernial repair with prosthetic polypropylene mesh implantation. Her recovery was uneventful.

Keywords- Spigelian hernia, Interparietal hernias, klinklosch, semilunar line

INTRODUCTION

The Spigelian hernia is an interparietal hernia which occurs through the Spigelian fascia composed of aponeurotic layer between the rectus muscle medially and semilunar line laterally¹. The most frequent location of these rare hernias is at or slightly above the level of arcuate line². Spigelian type of hernia is exceedingly rare with an incidence ranging from 0.12-0.2% of all abdominal wall hernia. Most Spigelian hernia are small about 1-2cm in diameter and developed during fourth to seventh decades of life³. Diagnosis of Spigelian hernia requires high degree of suspicion, with the most common findings on clinical examination presenting a lump at semilunar line. Ultrasonography and computed tomography of abdomen are useful in confirming the diagnosis. Once diagnosed it requires operative repair. We present a case of Spigelian hernia in a female patient who was admitted in the department of surgery in National Institute of Unani Medicine Bengaluru.

CASE PRESENTATION

A 48-year-old patient presented at OPD of NIUM Hospital with the complaint of swelling in the right iliac fossa with intermittent pain from last 6 months. Patient underwent open appendicectomy 5 years ago and after 2 year she developed post appendicectomy incisional hernia, for which she underwent Hernioplasty. Patient

was a known case of type 2 Diabetes mellitus and hypertension and on oral hypoglycaemic and antihypertensive drug from last 6 years.

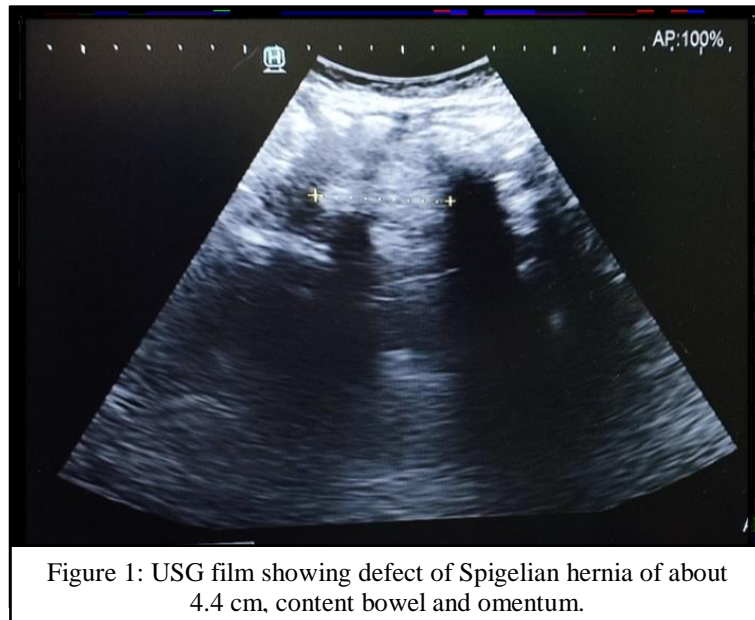


Figure 1: USG film showing defect of Spigelian hernia of about 4.4 cm, content bowel and omentum.

On examination patients Basal metabolic index was 28.9. Her vitals were stable, bilateral chest was clear with normal vesicular breathing sound, S1 & S2 were audible with no murmur, per abdomen soft and bulky, umbilicus centrally placed inverted, previous surgical scar mark were present at right iliac region. Physical examination revealed a firm lump of about 6×5 cm found on right lower abdomen in right iliac region at the right linea semilunaris. The lump was roughly oval shaped with smooth surface, indistinct margins, doughy consistency and mild tenderness present over the lump. The lump increased on coughing and decreased on lying down position. Investigation revealed hemogram, liver function tests, blood urea and Serum creatinine were normal. Confirmatory diagnosis based on USG of whole abdomen and pelvis showed grade I fatty liver and right side Spigelian hernia of defect measuring 4.4 cm with herniation of bowel and omentum.

After adequate preparation she was planned for open hernial repair with mesh implantation. Oblique incision of approximately 4 inch was given in right lumbar region, after dissecting in layers, intraoperatively right sided Spigelian hernia was found. After dissection of adhesions with the help of electrocautery, hernial content was reduced and defect was closed with continuous suture. After closing the defect, the prosthetic composite

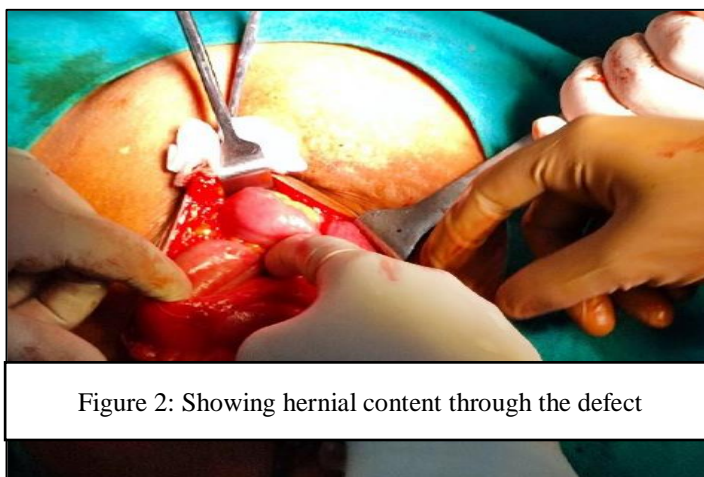


Figure 2: Showing hernial content through the defect

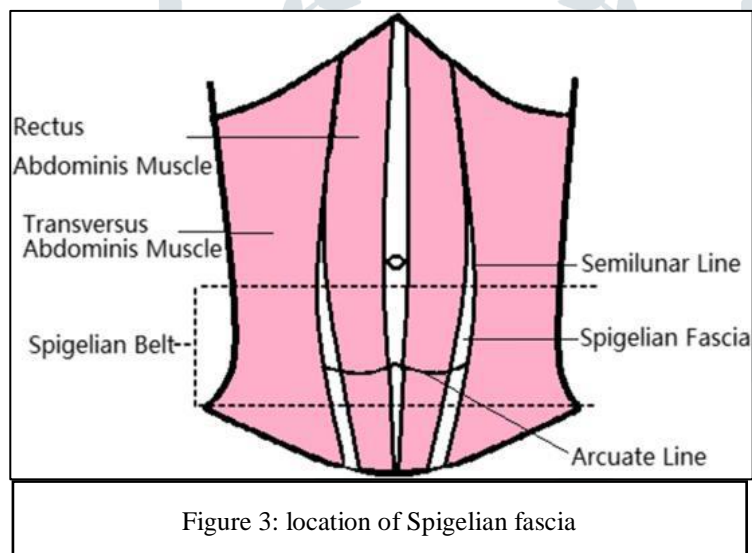
mesh (6*6 cm) was introduced and fixed with the help of tacks to cover the defect. Postoperative recovery was uneventful and patient was discharged on 7th post operative day.

DISCUSSION

Interparietal hernias are rare and occur when the hernia sac lies between layers of abdominal wall. Spigelian hernia is almost always interparietal. In 1764 klinklosch, was the first to describe Spigelian hernia, but in 1976 only Spangen became first to described detail aspect of the Spigelian hernia⁴. Spigelian hernia arises through the congenital or acquired defect in the Spigelian fascia. The Spigelian fascia lies between semilunar line and the lateral border of the rectus sheath. The semilunar line, that is also known as Spigelian line marks the transition from muscle to aponeurosis of the transverse abdominis muscle. A defect in this fascia result in Spigelian hernia.

These hernias are uncommon and probably underdiagnosed. They affect men and women equally and can occur at any age, but are most common in elderly people. The Spigelian fascia extends between the transversus muscle and the lateral border of the rectus sheath from the costal margin to the groin, where it blends into the conjoint tendon. Most Spigelian hernias appear below the level of the umbilicus near the edge of the rectus sheath, but they can be found anywhere along the Spigelian line⁵. As many as 90% are located 0 to 6 cm

cranial to the interspinal plane (the horizontal plane through both anterior superior iliac spine). The defects originate through the transverse abdominis muscle and may or may not involve the more superficial layers, hernia sac and contents often lie in an intramural location between abdominal wall layers and may or may not be palpable. Patients usually present with intermittent pain with or without lump. The diagnosis is usually



suspected because of the location of the symptoms and is confirmed by Computerised tomography or Ultrasonography. After confirmation of diagnosis surgery is recommended. Surgery can be open or laparoscopic. A Spigelian hernia is repaired because of the risk for incarceration associated with its relatively narrow neck.

CONCLUSION:

Spigelian hernia are very rare, often diagnosed at strangulation stage. With the advancement of medical imaging, diagnosis can be made timely. Once diagnose it requires surgical intervention. Choice of surgery is depending on surgeon's preference either open or laparoscopic with mesh implantation.

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