

Spigelian Hernia

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Abstract: *Spigelian hernia is the rare lateral ventral hernia which constitute around 0.1% of abdominal hernia. it occur through transversalis fascia. The hernia is prone for strangulation so early surgical repair is an important prognostic factor. Diagnosis is made by clinical examination and radiological investigation like ultrasound and CT scan. Treatment is hernioraphy or hernioplasty with hernioplasty being the better option. In this case report we are presenting a case of 45 year male patient with left side Spigelian hernia treated successfully.*

Keywords: Spigelian hernia

1. Introduction

Hernia is the protrusion of the viscus or a part of viscus through the wall which contain it with or without sac. Spigelian hernia is a type of rare interparietal hernia which occur through spigelian fascia between the rectus muscle and semilunaris muscle most common site being the lower abdomen because of absence of posterior sheath. Hernia sac is behind the external oblique muscle. The hernia is usually missed on general clinical examination and usual investigations like ultrasound.

2. Case Report

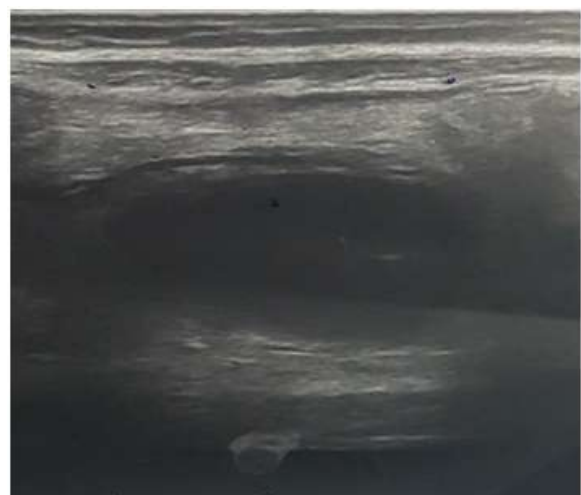
A 50 Year old male patient, presented with complain of dull type of pain in left lower abdomen and repeated vomiting in the emergency department with a palpable lump in left lower quadrant since 20days. There is no history of altered bowel habits, fever or abdominal distension. To start with the swelling appears on standing and disappear on taking rest but since last 7 days the swelling has become irreducible.



On clinical examination, patient's vitals were within normal limit and systemic examination appears to be normal. On local examination, a longitudinal oval swelling measuring approximately 7*6 cm in left lower quadrant around 2cm above ASIS 5cm below the left costal margin. A scar of previous renal surgery is present around 3 cm below the left costal margin otherwise the skin over the swelling appear to be normal as there was no redness and the skin is pinchable and no dilated veins were observed. Swelling has a smooth surface but there is no cough impulse and reducibility. There was no local rise of temperature. Rests of the hernia orifices were within normal limit and there was no lymphadenopathy.

Ultrasound abdomen of swelling done in emergency department revealed parietal abscess of around 36cc but later when done in the department by a senior sinologist revealed it to be an obstructed spigelian hernia. Plain x ray abdomen revealed no signs of obstruction and other blood reports including RFT and LFT were within normal limits. CT scan

was not done due to financial reason. Finally on the basis of clinical and radiological investigations, done patient was diagnosed to have an obstructed spigelian hernia.



Volume 7 Issue 11, November 2018

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With proper consent the patient was explored under general anesthesia by an oblique incision over the swelling and the herniating dark colored omentum with possibly compromised blood supply was found herniating through a defect along the lateral border of rectus sheath. The doubtful omentum was ligated and resected and the intestine loops

after checking for the viability were replaced back into the peritoneal cavity. Defect measuring approximately 2 cm was identified in transversalis fascia and repair as done with Vicryl 1'0 suture followed by mesh reinforcement using Prolene 2'0 suture material.



Post operative period was uneventful. Patient responded well to the treatment. Suture removal was done on post operative day 12 and the patient was followed in surgery OPD for 6 months after surgery where the patient's recovery was assessed and was found to be satisfactory.

3. Discussion

Spigelian hernia also called as the 'lateral ventral hernia' is a rare interparietal hernia found between different muscle layers of the abdomen. There is a congenital or acquired weakness in the spigelian fascia¹. It can occur along any part of spigelian line which run from 9th rib cartilage superiorly to pelvic tubercle inferiorly. The line depicts the transition from muscle fibres of transverse abdominal muscle to the posterior aponeurosis of rectus. Majority of spigelian hernia are found around the umbilical region having the widest portion of spigelian fascia. The hernia cannot occur medially due to the presence of intact rectus muscle and sheath.

Spigelian hernia are prone for strangulation due to narrow neck. These hernia constitute around 0.1 % of total abdominal hernias. Hernia peak between 4th to 7th decades² of life with slightly more occurrence in females as compared to the males. The most common sac content is omentum³.

20% of spigelian hernia will present as incarcerated hernia⁴. Patient may present with a lump in abdomen, pain abdomen or with features of obstruction⁴. Pain in the swelling increases with increase in abdominal pressure, and is relieved by rest.

The spigelian hernia can present with with acute abdomen features which require urgent exploration or in the chronic form where it is diagnosed as an incidental finding while

searching for the cause of recurrent abdominal pain. The differential diagnosis include of the rectus sheath hematoma, parietal abscess, lipoma or malignancy.

USG is the most reliable and easily available method to assist in the diagnosis. CT is to confirm the diagnosis. Treatment of spigelian hernia is the herniorrhaphy or hernioplasty with hernioplasty being the better option. Surgery is usually done in general anesthesia external oblique muscle splitting is done. Nozoe et al⁵ done the herniorrhaphy by suturing the internal oblique and transverse abdominus muscle to the rectus sheath. But the mesh reinforcement has given the better result⁶. Laparoscopic hernioplasty is the better option⁷ and the best results are obtained by the extraperitoneal laparoscopic approach⁸. In our case the patient presented with chronic spigelian hernia on left side and an open hernioplasty was done.

Funding: no funding sources

Conflict of interest: not declared

Ethical approval: not required.

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