

SPIGELIAN HERNIA: A RARE CASE REPORT

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ABSTRACT

Spigelian hernia is a type of abdominal wall hernia that occurs at the level of the arcuate lines through a slit-like defect in the anterior abdominal wall (semilunar line). It is extremely uncommon, with only a few thousand occurrences described in the literature. It accounts for 0.12% of the abdominal wall hernia. This unusual entity can be diagnosed with a thorough clinical examination and radiological studies. Given the possibility of imprisonment, the treatment for Spigelian hernia is surgery correction once the diagnosis has been verified. This instance of Spigelian hernia in a 46-year-old woman is reported here as a rare phenomenon among all external abdominal wall hernias.

KEYWORDS : crumb rubber, utilization, compressive strength, low cost, sustainable

INTRODUCTION

Spigelian hernia is a type of inter-parietal hernia that is uncommon¹. The majority of Spigelian hernias are found in the lower abdomen, where the posterior sheath is missing¹. The transverse aponeurosis has a well-defined hernia ring. The hernia sac is commonly intra-parietal, going between the transverse and internal oblique aponeurosis and spilling out behind the external oblique aponeurosis⁶. This condition can be detected by a thorough clinical examination. It's possible that the hernia is intra-parietal, given there's no visible lump on inspection or probing. Both traditional and laparoscopic methods have been used to repair the Spigelian hernia².

CASE REPORT



Figure 1

A 46 year old lady, presented with chronic dull aching pain in right iliac fossa associated with a palpable lump at the right lower quadrant of the abdomen since 2 years. She denies any history of bowel or bladder alteration. No associated history of fever, vomiting, nausea, constipation, abdominal distension. The swelling appeared on walking, straining and subsides on rest. Initially it was small and gradually progressed in size and was reducible.



Figure 2

On clinical examination (Figure 1), vital parameters were within normal limits. A fullness in the right iliac area was discovered during a local examination. She exhibited a 5cm × 5cm swelling in the right iliac fossa, lateral to the rectus

border, that was well defined on examination. It had a smooth surface with no scars, sinuses, or dilated veins on the skin over the swelling. The swelling was reducible, with a 3 x 3 cm defect palpable in the right iliac fossa. There was a positive cough impulse. The swelling was not tender, and there was no sign of a fever. The orifices in the rest of the hernia sites were within normal limits. There was no evidence of inguinal lymphadenopathy.

Abdominal ultrasonography, done revealed a defect in abdominal wall in right iliac fossa suggestive of reducible omental hernia in RIF.

On basis of clinical and sonological examination, a diagnosis of Spigelian hernia was made. Her routine investigations were WNL. X ray abdomen showed no sign of obstruction. Pre op USG supported our clinical diagnosis of Spigelian hernia. CT scan not done due to financial constraints.

After adequate preparation she was explored under spinal anaesthesia by an oblique incision over the swelling and was found to have herniation of omentum through a defect along the lateral border of rectus sheath.



Figure 3

The defect measuring 3 cm in length was identified and Preperitoneal mesh repair was done polypropylene mesh, suturing medial border of internal oblique and transverse abdominus muscle to the lateral border of abdominal wall and subsequent closure of layers.



Figure 4

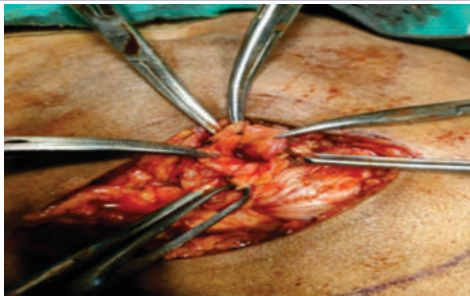


Figure 5

Post operatively, patient had an uneventful recovery. Suture removal was done on post-operative day 12. She followed up in OPD for 1 months after surgery where the patient was asymptomatic and clinical examination was unremarkable.

CONCLUSIONS

Spigelian hernia is a type of inter-parietal hernia that is rather uncommon.¹ It's also known as "hernia of the semilunar line" or "spontaneous lateral ventral hernia." It is called intraparietal, interstitial, intramuscular, or intra mural hernia because it is frequently wedged between the multiple muscle layers of the abdominal wall. Adrian Van der Spighell described semilunar like (linea spigeli) in 1645, and Spigelian hernia was named after him. In 1764, Klinkosch² described the hernia for the first time⁴.

The majority of Spigelian hernias are found in a transverse band that runs from 0 to 6 cm cranial to a line that runs between both anterior superior iliac spines and is known as the Spigelian hernia belt, where the Spigelian fascia is the widest.¹ Because aponeurotic fibres do not rearrange at the arcuate line, the overlying external oblique muscle and fascia remain intact. 20% of Spigelian hernia will present as incarcerated hernias.⁵ Symptoms can vary from abdominal pain, lump in the anterior abdominal wall or patient may have history of incarceration with or without intestinal obstruction. Pain aggravates on manoeuvre that increase in the abdominal pressure and is relieved by rest.⁵

Treatment of Spigelian hernia is operative repair once the diagnosis has been confirmed given the risk of incarceration. This is usually performed under GA given Spigelian hernia are ideally suited to preperitoneal laparoscopic repair because the defect is more clearly identified in the preperitoneal plane and best results are offered by the extra peritoneal laparoscopic approach as compared to intra-abdominal laparoscopic approach.

In our case, patient presented with a chronic spigelian hernia where a standard preperitoneal mesh hernioplasty was done.

REFERENCES:

1. Mittal, T, Kumar, V, Khullar, R, Sharma, A, Soni, V, Baijal, M., & Chowbey, P. K. (2008). Diagnosis and management of Spigelian hernia: A review of literature and our experience. *Journal of minimal access surgery*, 4(4), 95-98. <https://doi.org/10.4103/0972-9941.45204>
2. Nagarsheth, Khanjan H et al. "Laparoscopic repair of incidentally found Spigelian hernia." *JSLs : Journal of the Society of Laparoendoscopic Surgeons* vol. 15,1 (2011): 81-5. doi:10.4293/108680811X13022985131372
3. Yi-Chun Shih, Hsien-Pin Sun, Spigelian hernia showing itself as a left lower abdominal mass, *Formosan Journal of Surgery*, Volume 47, Issue 2, 2014, Pages 78-81, ISSN 1682 606X, <https://doi.org/10.1016/j.fjs.2013.12.002>, Volume 47, Issue 2, 2014, Pages 78-81, ISSN 1682-606X, <https://doi.org/10.1016/j.fjs.2013.12.002>.
4. Zachariah, Sanoop Koshy, and Priya Jose. "Laparoscopic Diagnosis of Incarcerated 'Spigelian Hernia': Report of a Case and Review of the Literature." *Case Reports in Surgery*, Hindawi, 19 Oct. 2011, <https://www.hindawi.com/journals/cris/2011/491802/>.
5. Ye, Zhou et al. "Spigelian hernia in the right upper abdominal wall: a case report." *BMC surgery* vol. 18,1 109. 27 Nov. 2018. doi:10.1186/s12893-018-0449-5
6. Lassandro F, Iasiello F, Pizza NL, Valente T, Stefano ML, Grassi R, Muto R. Abdominal hernias: Radiological features. *World J Gastrointest Endosc*. 2011 Jun 16;3(6):110-7. doi: 10.4253/wjge.v3.i6.110. PMID: 21860678; PMCID: PMC3158902.