

SPIGELIAN HERNIA: EXPERIENCE OF HOPITAL DE LA RENAISSANCE OF NDJAMENA (CHAD)

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ABSTRACT

Background: Spigelian hernia is an uncommon ventral hernia characterized by a defect in the semilunaris linea and is known as “hernias through the conjoint tendon”. The symptoms of Spigelian hernia are usually non-specific. CT scanning is considered the most reliable technique for diagnosis. These hernias require surgical treatment.

Case: A case of Spigelian hernia was diagnosed in the patient of 56-year-old man presenting with abdominal pain associated with a reducible mass in the right iliac fossa. CT scan confirmed the diagnosis. We had performed successfully surgical treatment to repair the hernia defect.

The recovery was uneventful.

KEYWORDS: Spigelian hernia, abdominal wall, Ndjamen

INTRODUCTION

Spigelian hernia (SH) is a rare condition first described by Adrian van der Spiegel about the anatomical limit of the abdominal wall area, lateral to the rectus abdominis muscle¹. Spigelian hernias develop in an anterolateral area of the abdomen between the anterior superior iliac spine and the umbilicus in proximity to the lateral margin of the rectus abdominis muscle². It account for less than 1% of all hernias diagnosed in the adult population³. We report a case of Spigelian hernia in a 56-year-old man.

CASE REPORT

A 56 year old man, presented at our surgical service with a 2 years history of abdominal pain

with reducible mass in the right iliac fossa. He had a history of appendectomy complicated with postoperative peritonitis in 2007.

Physical examination, revealed a large tender bulge on the right side of the patient's abdomen that was most prominent while the patient was standing up or was coughing. Laboratory investigations revealed hemoglobin (Hb) of 13 g/dl, normal electrolytes, urea and creatinine. A contrast enhanced abdomino-pelvic CT-scan revealed a right-sided spigelian hernia.



Figure 1: Right-sided spigelian hernia(white arrow).

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Surgical site preparation used standard techniques. The patient was explored under general anesthesia with cuffed tracheal intubation and good muscle relaxation. Oblique incision was made over the protrusion. External oblique aponeurosis was incised in the direction of fibers to expose the peritoneal sac. The sac was opened and adherents are removed from its surface. Inside we found viable small bowel omentum. Its neck was 5cm large. Omentum and small bowel were returned to the peritoneal cavity. After the sacligation and excision, the hernial defect was repaired with Mesh. We used polypropylene mesh 15/12 cm that was placed in the preoperative space. The mesh was fixed with tacks to the muscular abdominal wall. The postoperative course was uneventful with discharge at the 5th postoperative day. There was no recurrence up to one year of follow up.

DISCUSSION

Spigelian hernia is the protrusion of pre-peritoneal fat, a sac of peritoneum or an organ through a defect or weakness in the spigelian fascia^{4,5}.

Predisposing factors resulting from increase of intra abdominal pressure and factors attenuating oblique muscles' tone and connective tissue integrity are like other types of hernias⁶. So, Spigelian hernia may be related to stretching in the abdominal wall caused by obesity, chronic cough, multiple pregnancies, previous surgery or scarring⁵.

Spigelian hernia is frequently diagnosed between 50-70 years⁷.

The symptoms of Spigelian hernia are usually non-specific; main symptoms usually registered during consultation are: abdominal pain, a mass in the anterior abdominal wall or signs of incarceration with intestinal obstruction or not^{5,8}.

In this case, the diagnosis of spigelian hernia was suggested by the abdominal pain and

reducible mass in the right iliac fossa. According to earlier study⁹, only 50 % of spigelian hernia cases are diagnosed in preoperative period. The defect palpated at the lateral border of the right rectus abdominis muscle made obviously the diagnosis. Nowadays, CT scanning is considered the most reliable technique for diagnosis⁵.

A Spigelian hernia has to be distinguished from other pathologies located in the abdominal wall. Differential diagnoses reported are: appendicitis, abdominal abscess, abdominal hematoma, abdominal lipoma, diverticulitis and malignancy developed in the abdominal wall or in intra-abdominal organs⁸.

Spigelian hernias should always be operated due to the high risk of incarceration-related complications. Previous survey, a notable percentage (21%–33%) of patients with Spigelian hernias will be admitted for Spigelian hernias complication, requiring an emergency operation¹⁰.

There are two procedures for the surgical treatment: open method or laparoscopic method. The commonest content of the sac is omentum; Intestine, appendix, gall bladder, or ovaries have been reported in literature⁴. Comparatively to earlier studies we found in this case a sac containing viable small bowel and omentum.

Development of mesh and concept of tension free application to other hernias by Liechtenstein led to its use by many for spigelian hernias⁵.

Some authors recommended laparoscopic approach as the treatment of choice for elective treatment of Spigelian hernias¹⁰.

In our case, because of these several history of surgery, we decided an open approach and mesh placement through a right lateral laparotomy.



CONCLUSION

Spigelian hernia is rare. Symptoms are usually non-specific. Diagnosis can be facilitated by the

use of CT scan. Spigelian hernias should always be operated due to the high risk of incarceration-related complications.

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