# Spigelian hernia: Concerning a particular case

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**ABSTRACT:** Spigelian hernia is rare. It accounts for less than 0.1% of all abdominal wall hernias. It is often diagnosed at the complication stage. We report a case of a 52-year-old female patient with a clinical and morphological examination in favor of a spigelian hernia. Peroperative discovery showed a hernial sac with intestinal contents.

She underwent a cure of hernia by the placement of polypropylene mesh in the abdominal wall at the weak spot.

KEYWORDS: Spigelian hernia, Ultrasonography, Surgery, Polypropylene mesh, Case report.

#### 1 Introduction

Spigelian hernias are rare; they represent 1 to 2% of all abdominal wall hernias. This hernia is generally localized in the semilunar line in para and subumbilical [1]. Its cure is recommended given the high risk of strangulation of up to 30% [2]. The aim of our work is to highlight the interest of clinical and radiological diagnosis, as well as surgical management based on a case report and literature review.

## 2 CASE REPORT

Patient, 52 years old female, obese, multiparous with hypertension placed under treatment, with a current 4 years history of incipient swelling in left flank, gradually increasing in size, without transit disorder or deterioration of her general condition. On physical examination, patient was in good condition with a mass measuring 10 cm in diameter, tender, soft, painless and reducible, located on the left flank; without local inflammatory signs. Ultrasonography was in favor of spigelian hernia with digestive content. The patient was admitted to the operation block with per operative discovery of spigelian hernia which contains sigmoid colon. She underwent a cure for hernia by the placement of a retromuscular polypropylene mesh after an organ reduction. The postoperative surveillance was without anomalies. Six months after the surgery, the patient presented no signs of recurrence.

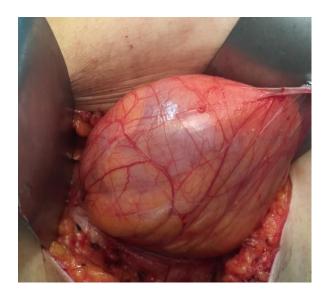




Fig. 1. Intraoperative image showing hernial sac with digestive content

Fig. 2. Intraoperative image of hernial sac opening and sigmoid colon



Fig. 3. Intraoperative image showing the placement of polypropylene mesh at the weak spot

## 3 DISCUSSION

Spigelian hernia is one of the eponymous hernias which are little known by young doctors. It was first described by Adriaan van der Spieghel in 1645 [1]. It corresponds to the protrusion of a peritoneal sac through an anatomical acquired or congenital orifice of the spiegel line; this particular site represents a diagnostic challenge [2]. It usually occurs after the age of 40 and affects both women and men. spigelian hernia is favored by undernutrition, obesity, pregnancy, parietal infection or ischemia, as well as chronic abdominal hyperpressure which occurs during coughing, vomiting and meteorism. Our patient was obese, multiparous with no other associated risk factor [3].

The clinical diagnosis of spigelian hernia is often difficult due to obesity, it can be confused with a lipoma or an intraabdominal tumor [4]. Hernia complicated by strangulation manifests as acute bowel obstruction. It represents more than half of the circumstances of discovery [5]. CT scan and ultrasonography are useful for diagnosis, with a sensitivity of 100% [1-6]. CT allows to see the muscle dehiscence and the contents of the hernial sac which can be omentum, small intestine, cecum, appendix or sigmoid as in our case [3-7]. Some atypical contents are described such as stomach, gallbladder, Meckel's diverticulum, uterine myoma or endometriosis nodule [8].

The risk of digestive necrosis justifies the surgical treatment once the diagnosis is confirmed [9]. The cure by the placement of polypropylene mesh in the abdominal wall at the weak spot by direct surgical approach is the most used and easiest therapeutic option as the case of our patient [5-10]. The laparoscopic approach is useful both for the diagnosis and the treatment of this type of hernia. This minimally invasive technique is simple and low risky with rapid postoperative recovery [10].

#### 4 CONCLUSION

Spigelian hernia is a rare location of abdominal defect, the clinical diagnosis is often difficult, but ultrasonography and CT scan are primordial for the diagnosis confirmation. The risk of Intestinal obstruction requires surgical treatment once the diagnosis is confirmed.

## **AUTHORS CONTRIBUTIONS**

All the authors have read and agreed to the final manuscript.

#### **GUARANTOR OF SUBMISSION**

The corresponding author is the guarantor of submission.

#### **SOURCE OF SUPPORT**

None.

## **CONSENT STATEMENT**

Written informed consent was obtained from the patient for publication of this article.

#### **COMPETING INTERESTS**

The authors declare no competing interests.

#### **DATA AVAILABILITY**

All relevant data are within the paper and its Supporting Information files.

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