

CASE REPORT

SPIEGEL HERNIA – CASE PRESENTATION

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ABSTRACT

The Spiegelian hernia or ventro-lateral hernia is produced through the effect of rupture of the abdominal wall fibers, near the semi lunar line. The hernia sac is usually accompanied by extra peritoneal fatty tissue and is intra parietal, it passes through the aponeurosis of the transverse muscle and internal oblique muscle, and it grows under the aponeurosis of the external oblique muscle. The Spiegel hernia is rare and is difficult to diagnose clinically. In this article we present the case of a 43-year-old patient who presented at the emergency department for a pseudo-tumor mass in the left flank and was diagnosed with Spiegel hernia.

Key words: Spiegel hernia, ventral hernia, rare hernia.

RÉSUMÉ

La hernie Spiegel ou la hernie ventrale se produit par la rupture des fibres de la paroi abdominale, près la ligne semi-lunaire. Le sac herniaire est généralement accompagné par le tissu adipeux extrapéritonéal et est intrapariétal, il passe à travers l'aponévrose du muscle transverse et de l'oblique interne et croît sous l'aponévrose du muscle oblique externe. La hernie Spiegel est rare et difficile à diagnostiquer cliniquement. Dans cet article, nous présentons le cas d'un patient de 43 ans qui s'est présenté en urgence pour une masse pseudo-tumorale dans le flanc gauche, qui a été diagnostiquée en peropératoire comme une hernie Spiegel.

Mots-clés: hernie Spiegel, hernie ventrale, hernie rare.

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INTRODUCTION

Spiegel hernia represents a rare clinic diagnosis. Diagnosis of Spighelian hernia represents a more difficult issue than its treatment. The clinical findings vary according to the content of the hernia and to its reducibility. A Richter variety (a lateral small bowel incarceration) is often present. Large, easily palpable hernias or those with clinical findings of occlusion are not a diagnostic problem, but small, reducible and intermittent ones are hard to find out. Computed tomography (CT) scan often remains the elective method of diagnosis.

CASE PRESENTATION

We present the case of a 43-year-old female, who presented at the surgical department for a pseudo-tumor mass in the left flank and intense local pain. The patient confirmed a surgical history (operated uterine fibromatosis) and arterial hypertension. The clinical exam points out a pseudo-tumor mass in the left flank, painful both spontaneously and palpatory, with a diameter of 8 cm, with minimal impulsion while coughing, and irreducible. The rest of the clinical exam was normal.

Blood tests results had no specific changes. The computed tomography (CT) scan described a left ventral hernia, which contains fatty tissue, extended cranially between the internal oblique and external oblique muscles, on the same side (Fig. 1). The differential diagnosis was made with a superficial tumor mass of the abdominal wall.

After the clinical and paraclinical exams, we decided to operate through a paramedian incision in the left flank (Fig 2, 3). The hernia was identified and reduced, and the wall defect was repaired with a polypropylene mesh, sutured under the oblique



Fig. 1. Computed tomography showing left Spiegel hernia

external muscle and superior to the internal oblique and transverse muscles (inlay repair).

The particularity of this case was represented by an irreducible Spiegel hernia that mimics a tumor mass of the abdominal wall. We could not differentiate this mass of a hernia by clinical exam and ultrasound, the diagnosis being established by CT scan.

Open mesh repair of Spighelian hernias, placing the mesh between the external and internal oblique muscles, is a simple and safe approach that can prevent morbidity related to other techniques¹.

Postoperatively, the patient had a quick, uneventful recovery, and was discharged the fourth day.

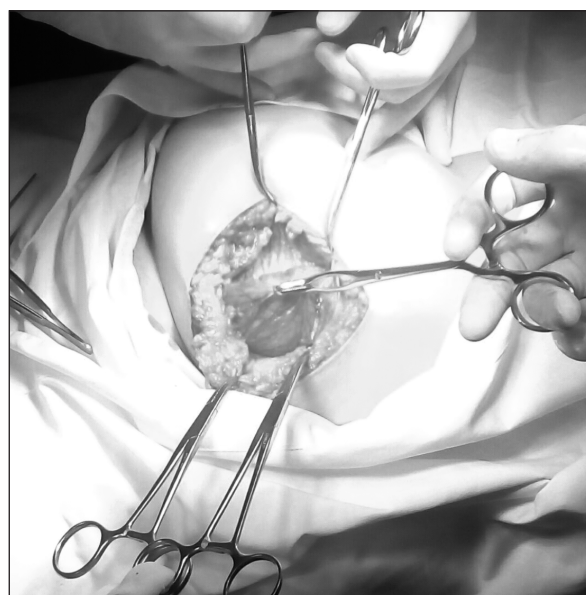


Fig. 2. Intraoperative image of Spiegel hernia sac at identification time.

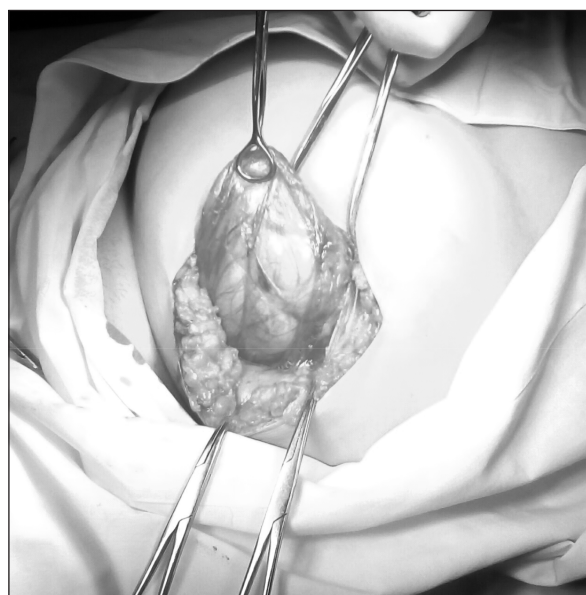


Fig. 3. Intraoperative image of Spiegel hernia sac before reduction.

The fourteenth day check -up was uneventful and the skin suture was suppressed.

DISCUSSION

The Spiegel Hernia is named after Adrian van der Spiegel, who first described the semilunar line². The hernia was first described by Klinkosch in 1764³. The hernia has a greater incidence in the fourth and seventh decade of life. The male:female ratio is 1:1⁴. Spiegel hernias are rare and their incidence represents 0.12% of abdominal hernias⁵.

The clinical diagnosis of the Spiegel hernia is difficult, it does not have particular symptoms and only 50% are diagnosed preoperatively^{6,7}.

The differential diagnosis is made with appendicular abscess, tumors of the abdominal wall, spontaneous hematomas of the right abdominal muscle or acute diverticulitis⁸.

The first recommended paraclinical examination is an abdominal ultrasound. Computed tomography is usually the most reliable imaging technique for the diagnosis of Spiegel hernias⁹.

Spiegel hernias have a great risk of strangulation, because of the fascial layer situated near the lesion. There have been reports of Richter hernias appearing in patients with Spiegel hernias, thus the surgical intervention must not be delayed in all diagnosed patients.

The surgical intervention can be done laparoscopically or open. Carter and Mizes were the first to repair the wall defect in a Spiegel hernia in 1992¹⁰.

CONCLUSIONS

Spiegel hernias represent a group of hernias which are difficult to diagnose clinically; they can complicate often. If diagnosed, surgical intervention must always be proposed. The repair of these defects can be done laparoscopically or classically¹¹.

We presented a case in which the computed tomography was very helpful to demonstrate the clinical suspicion of a Spiegel hernia. The surgical approach was central to confirming and repairing the abdominal wall defect.

Compliance with Ethics Requirements:

„The authors declare no conflict of interest regarding this article“

„The authors declare that all the procedures and experiments of this study respect the ethical standards in the Helsinki Declaration of 1975, as revised in 2008(5), as well as the national law. Informed consent was obtained from the patient included in the study“

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