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Spigelian hernia after laparoscopic hysterectomy: Case report

Laparoskopik histerektomi sonrası spigelian herni: Olgu sunumu

Zeynep Öztürk İnal [1], Hasan Ali İnal [1], Ender Alkan [2]

[1] Konya Education and Research Hospital, Departmant of Obstetric and Gynecology, Konya, Turkey
[2] Aksaray University Medical Faculty, Departmant of Radiology, Aksaray, Turkey

ORCID ID of the authors
ZÖİ: 0000-0002-8766-2079
HAİ: 0000-0002-8361-7908
EA: 0000-0002-8401-2193

Corresponding author / Sorumlu yazar:
Hasan Ali İnal
Address / Adres: Konya Eğitim ve Araştırma Hastanesi, 42090 Meram Yeni Yol Konya, Türkiye
e-Mail: dr.hasanaliinal@yahoo.com

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Abstract

A Spigelian hernia, which may be congenital or acquired, is a rarely seen (0.12–2%) defect of the anterior wall of the abdomen, often causing pain or swelling. Surgical treatment is recommended because of complications such as ileus and strangulation. In this presentation, a case of Spigelian hernia in a 57-year-oldwomen who presented with abdominal pain and ileus and was diagnosed using a computerized tomography scan in the trocar entry is discussed in light of the literature.

Keywords: Hysterectomy, Ileus, Spigelian hernia

Öz

Konjenital veya edinsel olabilen Spigelian herni, genellikle karın ağrısı veya karında şişkinliğe neden olabilen, karın ön duvarının nadir görülen (%0,12–2) bir defektidir. İleus ve strangülasyon gibi komplikasyonlar nedeniyle cerrahi tedavi önerilmektedir. Bu sunumda, 57 yaşında, karın ağrısı - ileus ile başvuran ve bilgisayarlı tomografi ile trokar girişi yerinde tanı konulan bir kadın hastadaki Spigelian herni literatür eşliğinde tartışılmıştır.

Anahtar kelimeler: Histerektomi, İleus, Spigelian herni

Introduction

A Spigelian hernia, which arises from transverse aponeurosis failure of abdominal fascia, may be seen from the ninth costal cartilage, called the semilunar line, extending from the lateral edge of the rectus abdominis to the symphysis pubis [1,2]. Any hernia between the fascial leaves may not be detected as an apparent mass with examination via inspection or palpation [3]. Laparoscopic surgery is mostly used in the treatment of hernias, and conventional methods may also be preferred [4,5].

Case presentation

In a 57-year-old female patient who was admitted to the emergency department with flatulence and abdominal pain on the 5th postoperative day after a laparoscopic hysterectomy operation, laboratory findings showed no leukocytosis, a potassium level of 3.2 mEq/L (3.5–5.1), dilated intestine, and free intraperitoneal fluid on ultrasonography (USG) examination. An abdominal computed tomography (CT) examination with oral and intravenous contrast showed dilatation of the stomach, duodenum, and jejunum, and a hernia incision with a diameter of about 4x3 cm containing small intestine was observed in an 18 mm diameter fascial defect (Figure 1, 2).

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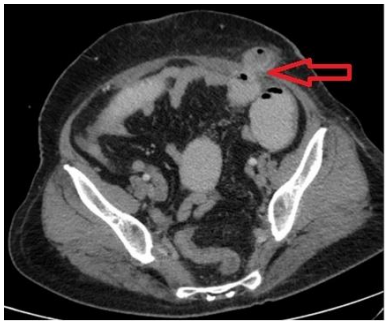

Figure 1: A Spigelian hernia, which extends under the skin from the lateral part of the left rectus muscle and contains the intestine, in the axial section of the abdominal CT scan.

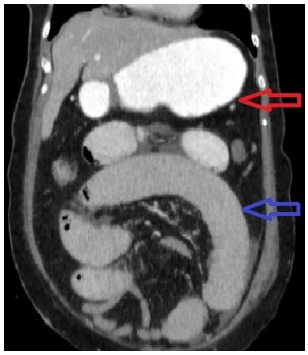

Figure 2: Contrast filled dilated stomach (red arrow) and small intestine (blue arrow) on coronal reformatted CT section.

The patient was diagnosed with Spigelian hernia with current clinical and imaging findings, and surgical intervention was decided. Primarily, laparoscopic surgery was tried, but the intestine was not reduced. Open surgical intervention was then performed, and the defect was covered with a mesh after the intestine was reduced. There was no necrosis of the intestine in the hernia incision, and no resection was needed because peristalsis of the intestine was observed (Figure 3). The patient, who could be fed orally on the 2nd postoperative day and had gas and fecal discharge, was discharged on the 4th postoperative day. There were no adverse effects in the control examination performed on the 10th postoperative day.

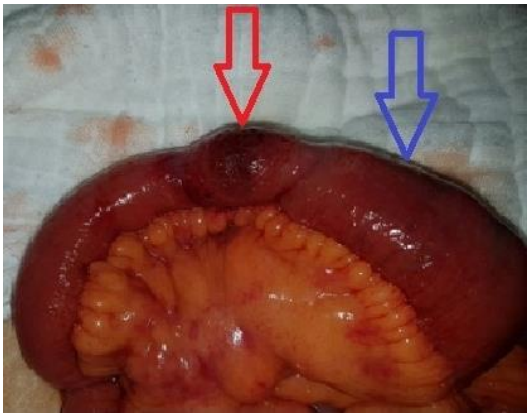

Figure 3: Strangulated intestine (red arrow) and the image of the dilated proximal intestine (blue arrow).

Discussion

Herniation of the linea alba, known as the Spigelian line, was first described by Klinkosch in 1764 and may occur as congenital or acquired [2,6]. Risk for Spigelian hernia peaks in the sixth and seventh decades and is slightly higher in females at 1.18/1 than in males [7].

Congenitally, the perforating veins can weaken the abdominal wall fascia and hernia can occur at these points. Acquired causes include obesity, which can cause tension on the abdominal wall, multiple pregnancies, and previous surgical intervention [3]. In our case, Spigelian hernia was observed as acquired in the trocar entry after a laparoscopic hysterectomy operation.

Spigelian hernias can be missed because of a lack of specific symptoms, difficult detection in the fascial leaves, or difficult mass detection with palpation. Only half of cases are diagnosed preoperatively [8]. In our case, the Spigelian hernia could not be detected with physical examination but was diagnosed with abdominal CT.

Surgical intervention is recommended for all Spigelian herniated patients because sharp edges of the fascia increase the risk of strangulation [2]. The operation can be performed by open surgery (laparotomy) or laparoscopic surgery. The first laparoscopic surgery for Spigelian hernia was performed by Carter and Mizes in 1992 via suturing the hernia incision [3]. Currently, meshes are used to close the hernia sac [4]. Laparoscopic surgery is preferred because the hospitalization time is shorter than open surgery, and patients' comfort is better than with laparotomy [9]. In our case, the laparoscopic approach was first tried to reduce the bowel. When this failed, open surgical repair was performed, and the fascial defect was closed with mesh.

In conclusion, if the hernia sac is between the fascial leaves, the diagnosis of hernia by physical examination is very difficult. Because of the high risk of strangulation in patients with Spigelian hernia, surgical closure of the fascial defect is recommended and a laparoscopic procedure with fewer postoperative complications is preferred.

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