CLINICAL CASE

1. Universidad Libre, Cali Campus. Cali, Colombia.
2. Clinica Imbanaco. Cali, Colombia.
   a. Resident specializing in gynecology and obstetrics, ORCID: https://orcid.org/0000-0003-1118-6501
   b. Resident specializing in gynecology and obstetrics, ORCID: https://orcid.org/0009-0009-5839-5619
   c. Gynecologist and obstetrician, subspecialist in laparoscopy and chronic pelvic pain, ORCID: https://orcid.org/0000-0001-9178-969X

Correspondence:
Daniel Mauricio Valencia Gonzales
✉ danielm-valenciag@unilibre.edu.co

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Abdominal wall endometriosis
Endometriosis en pared abdominal

Daniel Valencia González[1,a], Daniela Parra[1,b], Claudia Bastidas Guarin[2,c]

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ABSTRACT

A 41-year-old female with a history of pelvic endometriosis and left ovarian cystectomy presented with wound discharge two weeks post-surgery; biopsy confirmed subcutaneous endometriosis. Seven months later, she was readmitted with severe abdominal pain (8/10) and edema in the right iliac fossa. CT and ultrasound revealed a 179 cc multiloculated collection in the abdominal wall with muscular extension. Immediate surgery was dismissed due to the risk of lesion expansion. Management was initiated with Pregabalin 75 mg orally every 12 hours, initially for one week, achieving pain control. Subsequently, image-guided percutaneous drainage was performed, extracting 75 cc of chocolate-colored fluid with histological confirmation of endometrial tissue. The patient showed significant clinical improvement, continued neuromodulatory therapy with Pregabalin 75 mg orally every 12 hours for 3 months, and was finally assessed and managed by the minimally invasive gynecologic surgery and abdominal wall unit, undergoing successful surgical treatment..

Keywords: Abdominal wall endometriosis, Percutaneous drainage, Neuromodulation, Chronic pelvic pain.

RESUMEN

Paciente femenina de 41 años con antecedente de endometriosis pélvica y cistectomía de ovario izquierdo. Dos semanas posquirúrgicas presentó secreción por la herida, confirmándose endometriosis en tejido subcutáneo mediante biopsia. Siete meses después reingresa con dolor abdominal severo (8/10) y edema en fosa ilíaca derecha. La tomografía y ecografía revelaron una colección multiloculada de 179 cc en pared abdominal con extensión muscular. Debido al riesgo de expansión de la lesión, se desestimó la cirugía inmediata. Se inició manejo con Pregabalina 75 mg vía oral cada 12 horas inicialmente por una semana, logrando control del dolor. Posteriormente, se realizó drenaje percutáneo guiado por imágenes, extrayendo 75 cc de líquido achocolatado con confirmación histológica de tejido endometrial. La paciente presentó mejoría clínica significativa, continuó con la terapia neuromoduladora con Pregabalina 75 mg vía oral cada 12 horas por 3 meses y finalmente fue valorada y manejada en la unidad de cirugía ginecológica mínimamente invasiva y pared abdominal con posterior tratamiento quirúrgico exitoso.

Palabras clave: Endometriosis de pared abdominal, Drenaje percutáneo, Neuromodulación, Dolor pélvico crónico.

Introduction

Endometriosis is a chronic gynecological condition defined by the presence of endometrial tissue outside the uterine cavity[(1)]. It is estimated to affect approximately 10% of women of reproductive age and is commonly associated with pain and reproductive problems[(2)]. Although the condition predominantly involves pelvic organs, rare occurrences in extrauterine sites have been reported, including the abdominal wall[(3)]. Abdominal wall endometriosis, also referred to as abdominal or cutaneous endometriosis, is often associated with previous surgical procedures[(4)]. Its diagnosis remains challenging due to its low incidence and its clinical resemblance to other entities, such as lipomas, hernias, or neoplasms[(5)].

The purpose of this case report is to discuss a case of endometriosis in the abdominal wall, its clinical management, and the associated diagnostic and therapeutic implications.

Case report

A 41-year-old female patient, treated at the Versalles Clinic (Cali, Colombia), with a history of pelvic endometriosis diagnosed via exploratory laparoscopy on January 13, 2024. During that procedure, an endometri-

oma was found in the left ovary along with free chocolate-colored fluid, leading to a cystectomy and intraperitoneal lavage. Fifteen days later, she presented with bloody discharge from the surgical wound; a biopsy of subcutaneous tissue confirmed endometriosis, and treatment was initiated with danazol and a levonorgestrel intrauterine device.

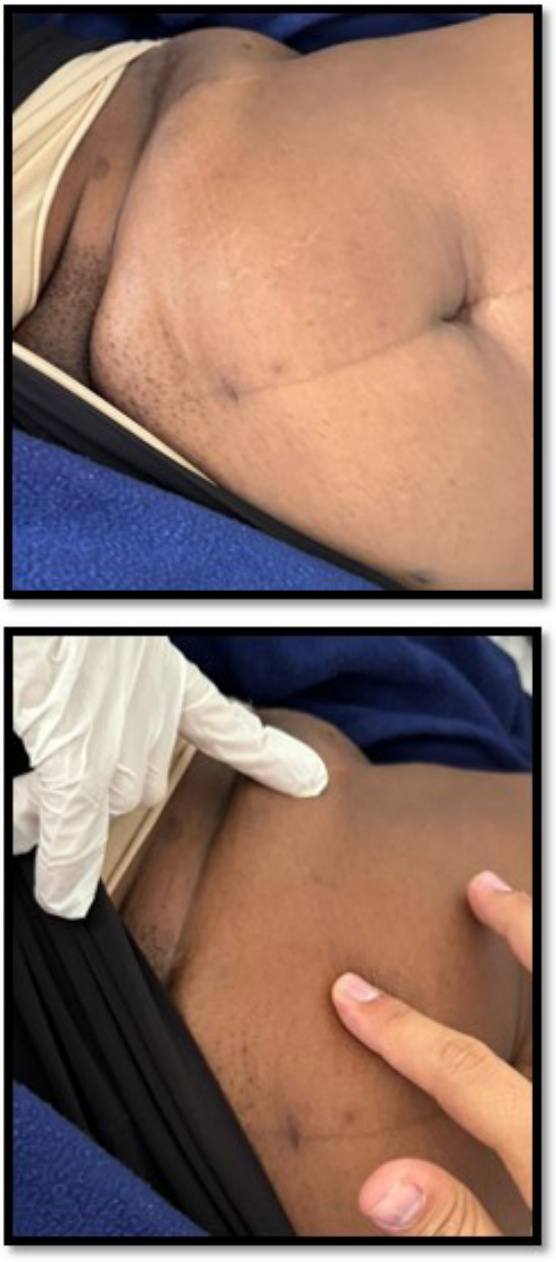
She was admitted to the emergency department on September 6, 2024, presenting a 7-month history of clinical symptoms consisting of stabbing abdominal pain rated 8/10 in intensity, with edema of the abdominal wall in the right iliac fossa and hypogastrium, which had worsened four days prior to the onset of menstruation. On physical examination, the patient was in pain but stable; the abdomen showed a surgical scar with no signs of infection, but with evidence of indurated edema without heat or redness in the lower right quadrant (Figures 1 and 2). On deep palpation, she reported pain in the right iliac fossa, with no signs of peritoneal irritation.

Given the persistent pain, a computed tomography (CT) scan of the abdomen and pelvis was performed, which revealed a 179-cc multilocular collection in the abdominal wall, involving the rectus abdominis, oblique, iliopsoas, and right sartorius muscles. This was supplemented with a soft tissue ultrasound, which revealed a serosanguineous collection with echogenic content and septa (6.6 x 1.8 x 2.1 cm) in the inguinal region, suggestive of an abdominal wall endometrioma.

She was initially admitted to the General Surgery ward and received antibiotics (ampicillin-sulbactam) and analgesics, but her pain did not improve. Following evaluation by Gynecology, the patient was deemed unsuitable for immediate surgical resection due to the risk of lesion expansion. Management with a neuromodulator was decided upon, initiating Pregabalin 75 mg orally every 12 hours, which resulted in an adequate response in pain control.

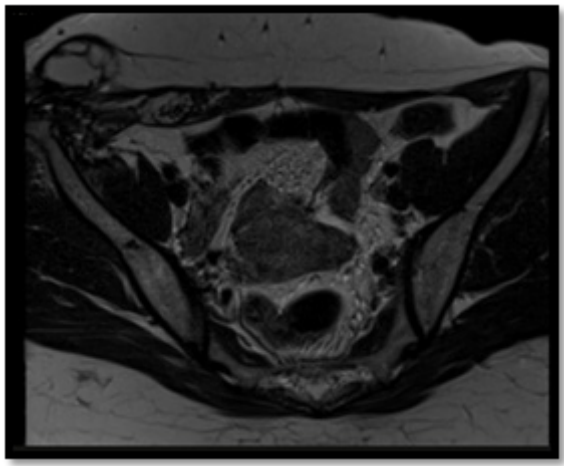
Subsequently, an MRI confirmed a heterogeneous, multilocular hematoma in the right abdominal wall extending into the groin, involving fatty tissue and the sartorius and iliacus muscles, as well as lymphadenopathy and IUD in an abnormal position (Figures 3 and 4).

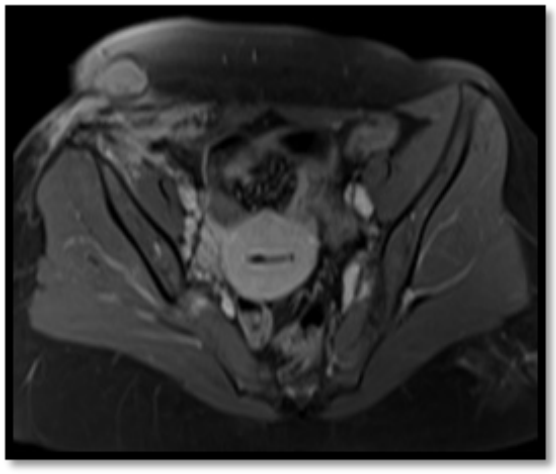
Figura 1 y 2. Endometrioma localizado en fosa iliaca derecha



Given the complexity of the case, percutaneous drainage was performed by the Interventional Radiology team for symptomatic relief, yielding 75 cc of chocolate-colored fluid with histological confirmation of endometrial tissue. The patient improved significantly with the proposed treatment, it was recommended to continue neuromodulatory therapy (Pregabalin 75 mg every 12 hours) for 3 months, and she was referred for

FIGURAS 3 Y 4. (A). Resonancia magnética pelvis T2. (B) Resonancia magnética pelvis T1.





definitive management by the Advanced Laparoscopy and Abdominal Wall Surgery team in the chronic pelvic pain unit, where she subsequently underwent surgical management with a satisfactory outcome.

Discussion

Abdominal wall endometriosis poses both diagnostic and therapeutic challenges due to its atypical presentation and the frequent absence of characteristic symptoms[6]. Although the disease is usually intrapelvic, its extrauterine location on the abdominal wall, especially over surgical scars, is an unusual but recognized phenomenon, with a reported incidence ranging from 0.03% to 3.5% in women of reproductive age[2].

The most widely accepted pathophysiological mechanism in these cases is the iatrogenic seeding theory[7]. According to this theory, endometrial cells are transported during gynecological surgeries and implanted in the abdominal wall, where they proliferate under hormonal influence[8]. Our case is consistent with this theory, given the appearance of the lesion on the scar from the laparoscopy performed seven months earlier, a site less common than the cesarean section but equally possible.

Clinically, the cardinal symptom is cyclic pain that worsens during menstruation, often associated with a palpable mass[12–13]. However, the presentation may vary, and in advanced cases the mass may adhere to deep structures, as we observed in our patient with involvement of the psoas and sartorius muscles, which complicates the surgical approach[14–15].

Diagnosis requires a high clinical index of suspicion supported by imaging. Although ultrasound is the initial modality, magnetic resonance imaging (MRI) is the modality of choice for a detailed evaluation, allowing for characterization of the extent of the lesion and its hematological content[17–18]. In this case, MRI was decisive in ruling out immediate radical surgery by revealing the anatomical complexity of the lesion.

Although the literature establishes complete surgical resection as the standard of care to prevent recurrence and malignant transformation[19], management must be tailored to individual patients in high-morbidity scenarios. In patients with extensive muscle involvement or a risk of wall defect, immediate radical surgery may not be feasible or safe[20]. Unlike the classic approach, a staged management strategy was prioritized in this case. Given that endometriotic tissue in the wall is typically fibrous and exhibits reduced hormonal responsiveness[21], pain management is complex; however, the use of the neuromodulator (pregabalin) proved effective in managing the neuropathic component resulting from deep infiltration, which helped control symptoms while the patient was being prepared for surgery.

Likewise, image-guided percutaneous drainage served a dual purpose: diagnostic, by histologically confirming the endometrial tissue, and therapeutic, by reducing the volume of the collection and the symptoms[16]. This allowed the patient to be stabilized and prepared for multidisciplinary follow-up by the advanced laparos-

copy and abdominal wall team, which ultimately resulted in the surgical resection of the endometrial tissue.

Conclusions

Abdominal wall endometriosis should be suspected in patients with cyclic pain and a history of surgery, requiring early diagnosis supported by magnetic resonance imaging to determine the extent of involvement in deep tissues. Although complete surgical resection is the gold standard for definitive control and prevention of recurrence, this report demonstrates that in highly complex cases or those with a risk of wall defect, management should not be exclusively surgical from the outset.

The use of minimally invasive strategies, such as image-guided percutaneous drainage and neuromodulator therapy (pregabalin), constitutes a valuable therapeutic tool. These interventions allow for symptomatic control of neuropathic pain and reduction of lesion volume, acting as an effective bridge that facilitates subsequent definitive surgical management under better conditions.

Finally, the approach should necessarily be multidisciplinary. Collaboration between gynecology, interventional radiology, and abdominal wall surgery is essential to ensuring comprehensive care that addresses both the anatomical resolution of the condition and the patient's quality of life.

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