Case Report

Abdominal Wall Endometrioma after Cesarean

Abstract: Endometriosis is defined as stroma and endometrial glands outside the endometrial uterine area. In the case of extrapelvic endometriosis, it has been found in the brain, soft tissues, and even the thorax. The incidence after a cesarean section is 0.03-0.45%. The clinic in these patients is usually a tumor close to a surgical scar that generates colicky pain, dyspareunia, dysmenorrhea. As treatment, complete excision with margins is recommended.

Study design: Case Report

Presentation of Case: A 45-year-old female patient who comes to the emergency room due to a 5-year-old picture of intense abdominal pain that increased with menstruation, requesting a tomography, finding image towards of the rectus abdominis. It was decided to schedule for surgery. Progresses properly, and her appointment with a pathology report which report endometrioma of the abdominal wall.

Discussion: Since 1860 when it was first described, about 40 years have passed before soft tissue endometrioma was described for the first time, being a rare diagnosis that, however, is believed to be underdiagnosed, because as with most patients and as occurred in this case, the diagnosis is usually late due to lack of knowledge on the subject. However, the diagnosis is difficult, as there are multiple differential diagnoses and it can be confused with a hematoma, granuloma or desmoid tumor, as happened to our patient, since during its evolution, it was suspected from a hematoma to pain of psychological origin. The diagnostic triad has been described that is cramping pain related to menstruation, history of gynecological surgery and tumor near the scar, fulfilling in our case. Surgical treatment has been described as the gold standard, performing an excisional biopsy with free margins to avoid recurrence, as it was done in this case.

Conclusion: Endometrioma is a rare differential diagnosis that is usually diagnosed late. Expertise is required when making differential diagnoses. It is important to refer to a gynecologist after diagnosis to assess concomitant endometriosis.

Keywords*: Endometrioma, Endometriosis, Abdominal Wall.*

1- INTRODUCTION

Endometriosis is defined as stroma and endometrial glands outside the endometrial uterine area, observed mainly in the pelvis as ovaries, Douglas fundus, uterine ligaments, peritoneum, intestine, and rectovaginal fascia, with a reported incidence of 3 to 15% in women of childbearing age and in 70% of women with persistent pelvic pain. (1–5)
Endometriosis was described for the first time in 1860 by Von Rokitansky and in 1899 it was described in the abdominal wall, although it has been commented that it was Robert Meyer in 1903. (3,6)

In the case of extrapelvic endometriosis, it has been found in the brain, urinary and gastrointestinal systems, soft tissues, and even the thorax. Its most frequent cause is gynecologic and obstetric procedures performed during pregnancy, with the theory of origin being directly implanting tissue in the work area and with the help of hormonal stimulation (estrogens), it proliferates to generate said tumor or it is believed that neighboring tissue can generate cellular metaplasia as a result of pluripotent cells. Another theory is the lymphatic or vascular pathway where endometrial tissue can reach the area of a surgical scar, forming cicatricial endometriosis. Some cases of endometriomas have even been reported at the trocar site after laparoscopy. (1,7,8)

It is said that the risk of generating scarring endometrioma after a cesarean section is 1.8%. (9)

The incidence of incisional endometriosis after a cesarean section is 0.03-0.45% up to 1.7%, after an abortion in the 2nd trimester it is 1%, being a rare pathology. (1,3,10,11).

The clinic in these patients is usually a tumor close to a surgical scar that generates colicky pain, dyspareunia (21%), dysmenorrhea (42%). (1,3,7)

The diagnosis is discussed, it is usually post-surgical with the help of histopathological examination, being achieved only in 20-50% pre-surgical with the help of studies. (1–3,6,8,10)

Aponeurosis and subcutaneous tissue involvement has been observed as the main sites of involvement. (12)

As treatment, complete excision with 1cm margins is recommended, recurrence is usually rare. Although treatment with medical therapy such as danazol, gonadotropin-releasing hormone analogues, or progesterone has been described, they usually have a partial effect and when treatment is discontinued, they often recur, dual treatment with surgery and post-surgical medications has been recommended. (1–3,5,10)

2- CASE REPORT

This is a 45-year-old female patient who comes to the emergency room due to a 5-year-old picture of intense abdominal pain that has been evolving, accompanied by nausea that prevents her from carrying out her daily activities.

The patient in the anamnesis refers to being hypertensive for 5 years on treatment with telmisartan, without allergies, she refers to a cesarean section 5 years ago without apparent complications. She denies having had any trauma in that area, the rest of the history is unimportant, she denies an important hereditary family history.

Her condition refers to it is starting 5 years ago with intermittent abdominal pain that increased with physical activity and with menstruation and later it was 1 week before menstruation, during and 1 week after.

On this occasion, he came due to intense abdominal pain, requesting an abdominal axial tomography, finding himself observed in the following images towards the lower third of the left rectus abdominis and dependent of this, an oval image with defined and regular edges, discreetly hyperdense, which causes local expansion of the muscle fibers without infiltrate ting the tissues.

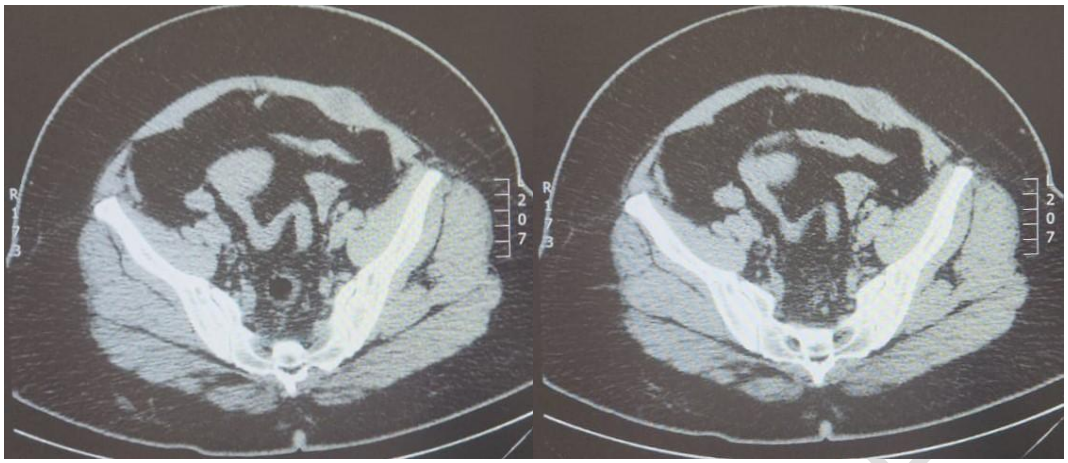
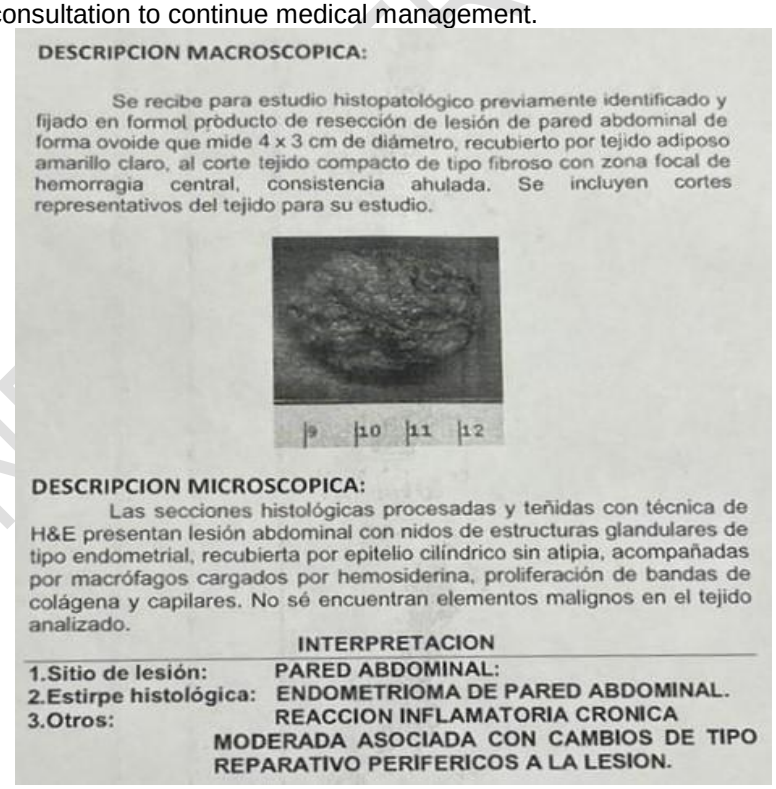


Fig. 1. Axial CT showing a tumor at the level of the rectus abdominis on the left flank. Source: Direct.

Due to continuing with intense abdominal pain, it was decided to schedule an open excisional biopsy, which was performed without complications, removing said tumor with a red-purple placement, of gelatinous consistency, which fell apart easily and was well adhered to the left rectus muscle.

The patient progresses with adequate evolution, it is decided to be discharged the next day and an appointment is made 1 week later without complications, with a pathology report which has a diagnosis of endometrioma of the abdominal wall, it is decided to send to a gynecology consultation to continue medical management.



DESCRIPCION MACROSCOPICA:

Se recibe para estudio histopatológico previamente identificado y fijado en formol pròducto de resección de lesión de pared abdominal de forma ovoide que mide 4 x 3 cm de diámetro, recubierto por tejido adiposo amarillo claro, al corte tejido compacto de tipo fibroso con zona focal de hemorragia central, consistencia ahulada. Se incluyen cortes representativos del tejido para su estudio.

DESCRIPCION MICROSCOPICA:

Las secciones histológicas procesadas y teñidas con técnica de H&E presentan lesión abdominal con nidos de estructuras glandulares de tipo endometrial, recubierta por epitelio cilíndrico sin atipia, acompañadas por macrófagos cargados por hemosiderina, proliferación de bandas de colágena y capilares. No sé encuentran elementos malignos en el tejido analizado.

INTERPRETACION

1.Sitio de lesión:	**PARED ABDOMINAL:**
2.Estirpe histológica:	**ENDOMETRIOMA DE PARED ABDOMINAL.**
3.Otros:	**REACCION INFLAMATORIA CRONICA MODERADA ASOCIADA CON CAMBIOS DE TIPO REPARATIVO PERIFERICOS A LA LESION.**

Fig. 2. Pathology report where an endometrioma of the abdominal wall is observed. Source: Direct.

3. DISCUSSION

In women of reproductive age, an important cause of persistent pelvic pain is usually endometriosis, which is usually intrapelvic, found mainly in the ovaries.(1-5)

Since 1860 when it was first described, about 40 years have passed before soft tissue endometrioma was described for the first time, being a rare diagnosis that, however, is believed to be underdiagnosed, because as with most patients and as occurred with our patient, the diagnosis is usually late due to lack of knowledge on the subject. (3,6)

Among the theories of endometrioma of the abdominal wall, those that speak of cellular metaplasia in pluripotential cells in the soft tissues or cell migration through the lymphatic or vascular route have been described, however, currently the most accepted has been direct mechanical implantation, which with the help of hormonal stimulation generates cell growth to form an endometrioma, as probably occurred in this case, after the cesarean section that she had 5 years ago, there was an inoculation of endometrial material in the rectus abdominis, being a highly vascularized organ and ideal for its formation. (1,7,8)

However, the diagnosis is difficult, as there are multiple differential diagnoses and it can be confused with a hematoma, granuloma or desmoid tumor, as happened to our patient, since during its evolution, it was suspected from a hematoma to pain of psychological origin. (1)

It is said that the risk of generating scarring endometrioma after a cesarean section is 1.8%. The incidence of incisional endometriosis after a cesarean section is 0.03-0.45% up to 1.7%, after an abortion in the 2nd trimester it is 1%, being a rare pathology, although some believe that it is underdiagnosed. (1,3, 9,10,11).

Ectopic pregnancies, tubo-ovarian occlusion, laparoscopy, amniocentesis, appendectomy, episiotomy, vaginal hysterectomy and hernioplasty, heavy menstrual flow and alcohol consumption, increased body mass index, the most important being hysterectomy, have been described as risk factors. In the case of protective factors, multiparity has been described, however, in some reports, it has also been described as a risk factor. These risk factors tend to be prevalent in our environment, since obesity, excessive alcohol consumption and a history of previous gynecological surgeries are frequent. (1,2)

A retrospective study was carried out in Taiwan with a single-center review of cases from 1994 to 2006, to look for ways to prevent this condition and find the most frequent locations. It included 22 patients with scarring endometriomas, 60% of the patients were in the 4th decade of life, all due to gynecological surgeries, most with Pfannenstiel-type incisions and found mainly in the corners, 3 patients had multiple lesions, with follow-up from 6 months to 12 years, without recurrence. (7)

The clinic in these patients is usually a tumor close to a surgical scar that generates colicky pain that increases with menstruation (71-96%), in 28% of cases it is not associated with menstruation, the onset of pain has been observed from months to years after surgery, dyspareunia (21%), dysmenorrhea (42%), a diagnostic triad has been described that is cramping pain related to menstruation, history of gynecological surgery and tumor near the scar, fulfilling in our case said triad, since as it has been found in our investigation, most of the patients with this condition tend to come due to cramping pain that is related to the menstrual cycle and a mass close to the site of previous gynecologic-obstetric surgery. (1,3,7)

It has been mentioned that the palpable mass can become fixed to planes in 88%, as occurred in our case, and mobile in 11%. (11)

This condition has been described in computed tomography as a circumscribed solid mass with areas of hemorrhage, in some cases fine water biopsy has been used, however, magnetic resonance imaging has been described as the best study in these cases. Care should be taken with the use of fine needle aspiration biopsy because of the risk of new implants at the puncture site. This presentation generates a delay in the diagnosis of several years, reporting from 1 to 32 years. The measurement frequently reported is from 4 to 14 centimeters. The median age at diagnosis is in the fourth decade of life. In our environment, it is difficult to access a magnetic resonance, so a simple abdominal tomography was performed, finding these findings described. (1–3,6,8,10)

In the case of using ultrasound as the first diagnostic method, this pathology has been described as a hypoechoic mass with the presence of peripheral vasculature on color Doppler, but a pre-surgical diagnostic failure of 55.5% is commented. (11)

The aponeurosis and the subcutaneous cellular tissue are usually the main affected, being up to 46% to 70% of the cases, being implanted mainly in the corners, the endometrium has been found more frequently in the Pfannenstiel incisions, due to being the most used in cesarean sections due to its advantages, however, they also generate greater blood loss and greater tissue dissection, which may contribute to the pathogenesis, although this occurred in our case, it is debatable, due to Being a widely used incision unlike vertical ones, where every day they tend to be performed in less quantity, and studies must be carried out comparing said assertion. (5,12)

Surgical treatment has been described as the gold standard, performing an excisional biopsy with free margins of 0.5 to 1 cm to avoid recurrence, which, although with rates of 1-5 to 7.5%, are usually clinically important, since among the risk factors for this, size, depth in planes are described, as occurred in our case, and surgery with free margins. It was decided to refer to a gynecology clinic to continue post-surgical medical management to avoid recurrence and to rule out endometrium. concomitant intrapelvic sis that has been reported from 14 to 26%, however, in some studies, lower rates have been found due to the lack of pelvic exploration. (1–3,5,10)

The use of pre-surgical medications is used only for temporary pain management, since recurrence after their removal is rapid and high, although in some cases it has been used to reduce the size of the tumor and to facilitate resection. In the case of post-surgical treatment, a decrease in recurrence has been observed. (5,8)

The main cause of recurrence has been described as inadequate initial resection, observing higher rates for this cause of up to 5-9%. (8,9)

Cases of endometrial cancer in endometriomas of the abdominal wall have been reported with a risk of approximately 1%, however, the prognosis has been described with a 5-year survival of 40%, finding average rates in some studies of 42 months, mainly due to the delayed diagnosis, they are usually observed with the same epidemiology as endometrioma, with a mean age of 46 years, late diagnosis of up to 17 years and a size of 4 to 17 centimeters. being mainly of clear cell lineage, endometrioid, serous and mainly mixed, it has not been found that CA-125 increases in all patients and recurrence has been observed to be high, its treatment is like other cancers, with resection with margins and adjuvant chemoradiation. (3,6,7)

The prevention of this pathology has not been described in an important way, finding small reports on how to prevent it, recommending removing the gauze used in the uterine cavity, not reusing sutures used in the uterus, externalizing the uterus when suturing it, suturing the visceral peritoneum, cleaning the wound from the wall and irrigating with solution before closure and closing subcutaneous dead spaces. (7,11)

4. CONCLUSION

Endometrioma is a rare differential diagnosis that is usually diagnosed late, causing physical discomfort to the patient for months to years. Expertise is required when making differential diagnoses in patients of reproductive age and previous gynecological surgeries. It is important to refer to a gynecologist after diagnosis to assess concomitant endometriosis.

CONSENT

As per international standard, Participants' written consent has been collected and preserved by the author(s).

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