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Case Report

Abdominal Wall Endometriosis Presenting as a Bloody Mass in a Patient with a History of Four Cesarean

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Abstract

Keyword:

Endometriosis; Bloody mass; previous Cesarean section

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Background: Endometriosis of the abdominal wall (AWE) is a rare and often misdiagnosed condition that usually arises in surgical scars, especially after obstetric and gynecological procedures. Includes ectopic implantation of endometrial tissue in the abdominal wall, most common in the course of previous cesarean sections. AWE may manifest as a painful lump, often periodically painful, but in rare cases, it can appear with unusual features such as bleeding. **Case presentation:** We reported the case of 39-year-old woman gravida 7 para 4 and 3 miscarriages. who appeared on a painful mass that gradually enlarged in the lower abdominal wall, associated with intermittent bloody discharge from the site. The patient had a surgical history of four cesarean sections, the last of which occurred 7 years ago. A physical examination revealed a hard and thin lump under the skin near the former Pfannenstiel incision. Ultrasound and MRI have suggested the presence of a heterogeneous lesion consistent with endometriosis. Excisional biopsy was performed, and histopathological analysis confirmed the diagnosis of endometriosis of the abdominal wall Complete surgical removal with negative margins Is the treatment of choice and the symptoms disappeared completely. **Discussion:** AWE should be considered in the differential diagnosis of any painful lump in the abdominal wall, especially in women with a history of cesarean section or other pelvic surgeries. The unusual symptom of bleeding from the mass is uncommon but can occur due to superficial erosion of the lesion. Imaging is necessary for planning before treatment, but the final diagnosis is confirmed histologically. **Conclusion:** This condition. highlights the importance of clinical suspicion of painful bloody mass in patients with atypical symptoms after caesarean section. Early identification and proper management by Complete surgical removal with negative margins is key to successful treatment and prevention of recurrence.

Introduction

Endometriosis is a chronic estrogen-dependent condition characterized by the presence of functional endometrial glands and stroma outside the uterine cavity. While it primarily affects the pelvic organs, extra-pelvic manifestations, such as endometriosis of the abdominal wall (AWE), represent a rare but significant subgroup. AWE usually occurs in surgical scarring after obstetric or gynecological procedures, especially caesarean sections, due to the direct implantation of endometrial cells during the incision and closure of the uterus.

The incidence of AWE is relatively low, estimated at 0.03-2% among women undergoing cesarean section. The condition may remain insufficiently diagnosed due to its nonspecific symptoms, which often include a tangible lump, local pain, and periodic exacerbations associated with menstruation. In rare cases, patients may show atypical features such as bleeding from the lesion, leading to diagnostic confusion with cysts, hernias, hematomas, or even malignant tumors. Here, we present the case of a woman with a history of four cesarean sections who had a painful blood mass in the lower abdominal wall. The unusual symptom of external bleeding from the lesion emphasized the diagnostic challenge and highlighted the importance of AWE consideration in women who have undergone previous uterine surgery. This report aims to raise awareness of this unfamiliar clinical entity and to enhance the role of imaging, clinical suspicion and histopathological confirmation in the diagnostic and therapeutic approach.

Case Presentation

A 39-year-old woman was brought to the gynecological clinic with complaints of a painful lump in the lower abdominal wall that was gradually increasing in size over

the past six months. The pain was localized, acute in nature and periodically aggravated during menstruation. During the previous two menstrual cycles, intermittent bloody discharge from the covered skin was observed, which led to medical evaluation. the patient had an important surgical history of four caesarean sections in the lower part, the last of which was performed seven years ago. She denied having any history of pelvic endometriosis or other gynecological diseases. There was no fever, systemic symptoms or a history of trauma in the area.

On the physical examination, a solid, thin, irreducible subcutaneous mass with a diameter of about 8 cm was felt near the left lateral edge of the former Pfannenstiel incision. The covered skin was severally erythema, with area of ulceration and bloody secretions. There were no obvious signs of hernia.

Ultrasound revealed heterogeneous and hypophonic lesion with internal blood vessels. Magnetic resonance imaging (MRI) described the mass as a nonspecific lesion involving subcutaneous tissue and primary fascia, indicating endometriosis. the patient underwent surgical removal of the mass under general anesthesia. During surgery, it was found that the lesion infiltrates the subcutaneous fat and anterior rectal sheath, without peritoneal intervention. Complete excision with clear margins was achieved. Pathological histological examination confirmed the diagnosis of endometriosis, revealed endometrial glands and stroma surrounded by chronic inflammation and macrophages loaded with hemosiderin.

The patient had a quiet recovery after surgical operation and in her three-month follow-up, she remained asymptomatic, with no evidence of recurrence

Investigations

Ultrasound demonstrated a hypoechoic lesion with internal vascularity. MRI revealed a heterogeneous, ill-defined mass infiltrating the subcutaneous tissue and fascia,

raising suspicion of endometriosis. No involvement of intra-abdominal organs was noted.

Differential Diagnosis

- Incisional hernia
- Suture granuloma
- Lipoma
- Desmoid tumor
- Abdominal wall abscess
- Endometriosis

Treatment

The patient underwent surgical excision of the mass under general anesthesia as well as medical treatment. The lesion was excised completely with clear margins, including portions of the anterior rectus sheath. The specimen was sent for histopathology.

Outcome and Follow-Up

Histological analysis confirmed the diagnosis of abdominal wall endometriosis, with endometrial glands and stroma, chronic inflammation, and hemosiderin-laden macrophages. The patient's postoperative recovery was uneventful. At three months follow-up, she was symptom-free, with no evidence of recurrence.

Discussion

Abdominal wall endometriosis (AWE) is a rare but increasingly recognized form of extra pelvic endometriosis, usually occurring at the sites of previous surgical intervention, most commonly incisions of cesarean delivery. The condition results from the therapeutic implantation of endometrial tissue in the subcutaneous or muscular layers of the abdominal wall during uterine surgery, these ectopic implants remain hormonally responsive and can lead to a range of symptoms. The classic symptom of AWE involves a hard, thin lump in or near a surgical scar, often associated with periodic pain corresponding to the menstrual cycle. However, as

indicated in this case, the display may be atypical. Bleeding or discharge from the lesion is unusual but may occur when the lesion erodes through the covered skin or becomes infected secondarily. These atypical features may lead to a delay in diagnosis or misdiagnosis such as cysts, hematomas, surgical hernias, lipomas or oncological processes. Imaging plays an important role in diagnostic work. Ultrasound is usually the first-line method, often revealing a hypoechoic solid mass with altered blood vessels. MRI provides superior soft tissue contrast and can determine the extent of infiltration, especially when the lesion involves deeper structures such as fascia or muscle. However, the final diagnosis requires satisfactory histological confirmation after surgical removal.

Complete surgical removal with negative margins is the treatment of choice, as it provides symptom relief and reduces recurrence. Medical administration with hormone therapies may provide temporary relief but is generally ineffective in treating AWE and carries a high risk of symptom recurrence when stopped. In our case, complete surgical removal led to a complete symptom resolution without recurrence in three months. This condition emphasizes the need to increase clinical suspicion of AWE in women with a history of cesarean section with unusual lumps of the abdominal wall, especially those with periodic or hemorrhagic features.

Conclusion

Endometriosis of the abdominal wall is an uncommon but significant differential diagnosis in women with painful lumps in the abdominal wall, especially those with a history of caesarean section or other pelvic surgeries. Although it is usually accompanied by periodic pain and swelling, unusual manifestations such as bleeding from the lesion, as indicated in this case, can obscure the diagnosis and lead to mismanagement.

High clinical suspicion, detailed surgical history and proper imaging are essential for accurate diagnosis. The final treatment requires complete surgical removal with histopathological confirmation. Early identification and intervention is key to preventing complications, relieving symptoms and reducing the risk of recurrence. This case highlights the need for awareness of the atypical presentations of AWE and reinforces the value of considering endometriosis in assessing any suspicious lesion near a previous surgical scar in women of reproductive age.

Learning Points

- Abdominal wall endometriosis is a rare but significant complication following cesarean section.
- Cyclic pain and mass at a surgical scar are classic, but bleeding is a rare presentation.
- Imaging, particularly MRI, helps in preoperative assessment, but diagnosis is confirmed histologically.
- Complete surgical excision is curative in most cases.
- Clinical suspicion is key to avoiding misdiagnosis and delayed treatment.

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