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Endometriosis of the Abdominal Wall: A Case Report

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Abstract **Case Report**

Abdominal wall endometriosis is a rare condition characterized by the presence of endometrial tissue outside the uterus, typically within the abdominal wall muscles. This condition often presents with cyclic abdominal pain, swelling, and a palpable mass, mimicking other abdominal pathologies. Diagnosis is challenging and requires a high index of suspicion, especially in women of reproductive age with a history of pelvic endometriosis. Imaging studies such as ultrasound and MRI can aid in diagnosis, but definitive diagnosis is made through histopathological examination of excised tissue. Treatment options include surgical excision of the lesion with clear margins to alleviate symptoms and prevent recurrence. Multidisciplinary collaboration between gynecologists and general surgeons is essential for optimal management of abdominal wall endometriosis cases. We present the case of a 38-year-old female patient diagnosed with endometriosis involving the right abdominal muscle.

Keyword: Endometriosis, abdominal wall.

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INTRODUCTION

Abdominal parietal endometriosis is defined as the ectopic implantation of endometrial tissue outside the uterine cavity.

It affects 8-15% of women during the reproductive period.

The rectus abdominis muscles are the most frequently affected.

The aim of our work is to illustrate this rare case of external endometriosis.

CASE REPORT

We report a case of endometriosis of the abdominal wall, collected in the Radiology Department, Mother and Child Hospital, CHU Mohammed VI, Marrakech.

The patient was a 38-year-old woman with no specific pathological history, 3 gestations, 3 part women with vaginal delivery, who presented with swelling of the anterior abdominal wall and umbilicus associated with cyclical abdominal pain.

Ultrasound: Nodular formations within the rectus abdominis and periumbilical muscles, oval, hypoechoic and heterogeneous, discreetly vascularised on colour Doppler.

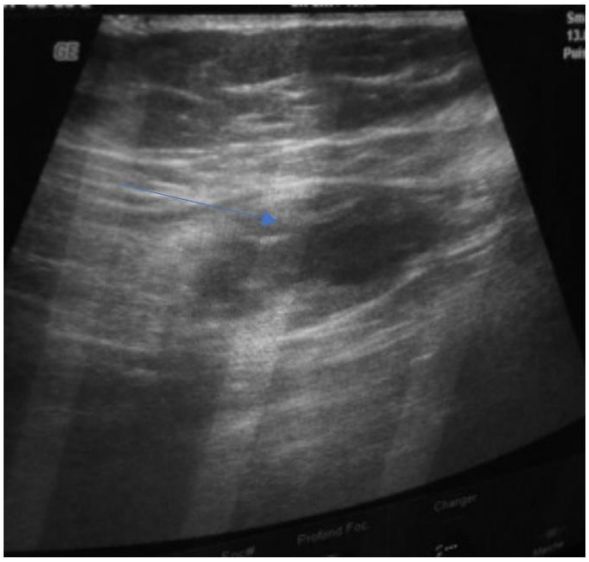
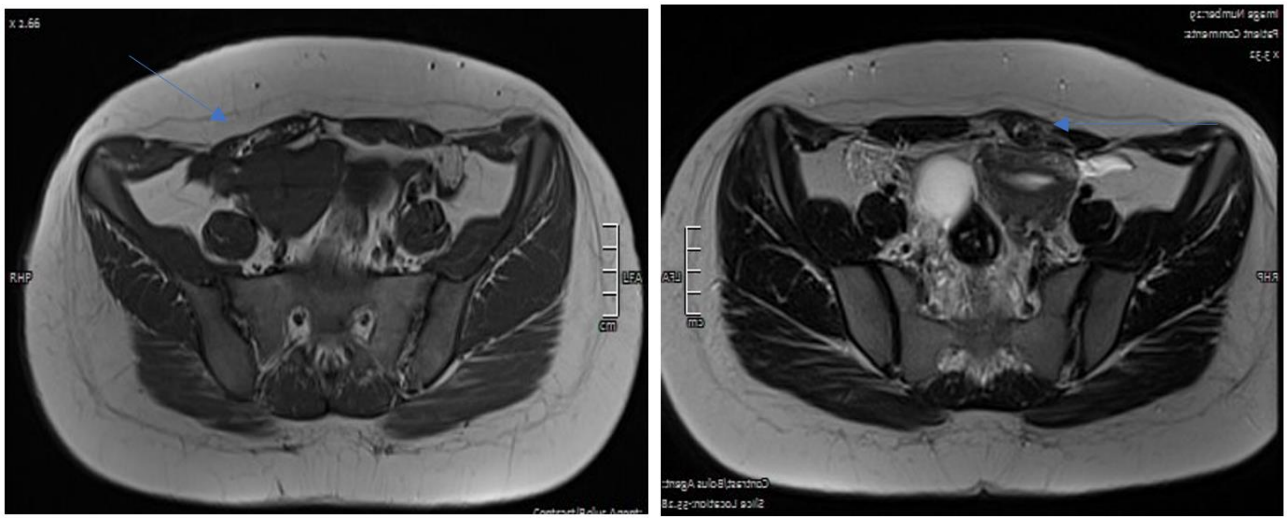


Fig. 1: US: Intramuscular nodular formation of the rectus abdominis, oval, hypoechoic and heterogeneous, discretely vascularized on color Doppler

On MRI: Right parietal mass of the rectus abdominis muscle opposite the uterus, with heterogeneous T1 and T2 hyper signal, not fading on fat saturation sequences,

enhancing after injection of PDC, associated with a small parietal nodule in the umbilical region with T1 iso signal, T2 hyper signal, not enhanced by contrast.

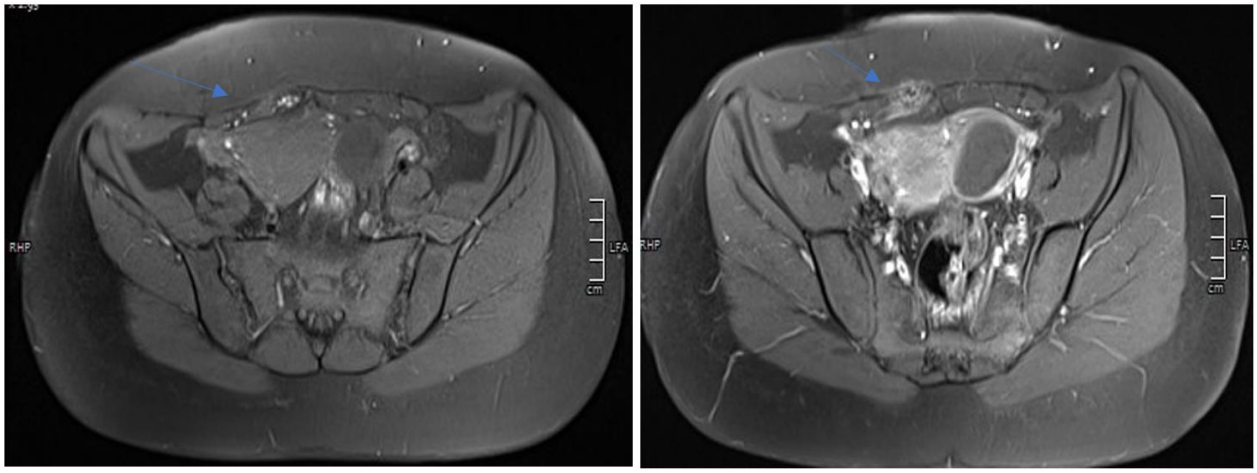
The parietal lesions were reported to be of endometriotic origin.



(T1) (T2)

Fig. 2: Right parietal mass of the rectus abdominis muscle next to the uterus

Heterogeneous T1 and T2 hyper signal.



(T1 FS) (T1 + Gado)

Fig. 3:

- Right parietal mass of the rectus abdominis muscle opposite the uterus.
- Heterogeneous T1 and T2 hyper signal.
- Does not fade on fat saturation sequences.
- Enhancement after injection of PDC.

DISCUSSION

Parietal endometriosis is a rare entity.

It occurs most frequently in scars from surgical operations with hysterotomy, and affects 0.03 to 0.4% of caesarean section scars.

Some cases of primary parietal endometriosis have been reported, particularly in the umbilicus, rectus muscles and inguinal region, secondary to dissemination via vascular or lymphatic routes. The etiopathology remains unclear.

Clinically, parietal endometriosis is classically manifested by the following triad: a palpable, firm mass, lateral to the midline and adherent to the fascia, with cyclical pain and catamenial exacerbation.

Ultrasound: The first examination to be requested. The image is generally rounded, unilocular, with a smooth, regular wall, thick and hypoechoic. The vascularisation studied by Doppler varies during the menstrual cycle.

MRI: A key examination, shows the particular signal of haemorrhage in endometriomas (2), an iso or hypointense nodule in T1 and T2 punctuated by hyperintense foci in T1 and T2 (4). The T2 hypo signal of the wall surrounding the lesion is fairly characteristic of endometriosis.

Confirmation: is based on histological study of the excised material when it shows the presence of endometrial glands. The differential diagnosis is discussed with adenocarcinoma or adenocarcinoma metastases.

Excision: The gold standard of treatment. It should be performed well off the lesion, with the use of a prosthetic plate if there is significant fascial deficiency.

Recurrences are not uncommon. The rate of recurrence correlates with the size and depth of the lesion.

Prevention in the case of laparotomy is based on abundant washing of the abdominal cavity and the scar at the end of the operation, as well as a change of gloves during parietal closure.

CONCLUSION

Any mass in a woman's abdominal wall associated with cyclical pain should raise the suspicion of endometriosis of the abdominal wall, especially if the patient has undergone gynaecological surgery.

Extensive excision is essential because of the risk of carcinogenesis.

Imaging, and in particular MRI, is the key examination for orienting the diagnosis.

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