

Endometriosis of the Iliacus and Psoas Muscle: Case Report

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ABSTRACT

Background: Endometriosis is a prevalent benign, inflammatory, estrogen-dependent disease that affects between 1% to 11.5% of women. Deep endometriosis is one of the three types of endometriosis. Described as “deeply infiltrating endometriosis” or “adenomyosis externa,” and it is characterized histopathologically as endometrial glands and stroma penetrating adjacent fibromuscular tissue, obliterating and substituting connective tissue septa. **Objective:** The present work aimed to report a case of endometriotic of the iliacus muscle and psoas muscle. Mention the place and time of the study. **Conclusion:** Deep endometriosis is rare to infiltrate the retrosoas area (iliacus, iliopsoas) and the diagnosis can be difficult, therefore a comprehensive patient assessment is necessary for adequate treatment. The use of appropriate imaging techniques, such as MRI and CT scans, is essential to show the lesions.

Keywords: Endometriosis, Iliacus muscle, Psoas muscle.

INTRODUCTION

Endometriosis is a condition in which the endometrial glands and stromal tissue are found outside of the uterus, primarily in the pelvic cavity. It's a chronic, estrogen-dependent inflammatory disease that affects women during their reproductive years and is linked to pelvic discomfort and infertility (1,2).

It is classified into 4 stages according to the American Society for Reproductive Medicine. Peritoneal and ovarian endometriosis are the more common types, whereas deep infiltrating endometriosis refers to lesion invasion ≥ 5 mm. Endometriotic lesions may be located in the uterosacral ligaments, rectouterine pouch, vaginal vault, rectum, or colon. They can also invade the bladder wall and ureter. Endometriosis has been found in other areas of the body including scar endometriosis (abdominal and perineal incision) and rare distant endometriosis, such as in the lungs, pleura, groin, diaphragm, sciatic nerve, outer ear, and scalp (1,2).

CASE REPORT

A 44-years-old female, married, regularly menstruating Saudi patient, was presented to the gynecology outpatient clinic at National Guard Hospital, Jeddah, Saudi Arabia suffering from right-side hip pain in 2014.

After taking a full detailed history with serial examination and investigation. She was diagnosed with endometriosis and treated with laparoscopic surgery outside the country. After the surgery, she is continued to follow with the gynecology team for 3 years. In 2017 the patient had an episode of low back pain with bilateral hip pain and right trochanteric hip pain, associated with loss of weight and loss of appetite, and irregular menstrual cycle.

On examination, the patient was conscious, alert, oriented, and vital signs were within normal parameters. Normal gait without any assistive device. The range of motion of the hip and lower extremity was intact with

pain in the hip movement bilaterally. On palpation, there was an abdominal tenderness with guarding abdomen, localized tenderness at the right trochanteric area, localized tenderness at the lumbar area of the spine and paraspinus muscle. Distal neurovascular was examined and it was intact.

Laboratory investigations and radiological studies were done. Laboratory results were unremarkable while the X-ray pelvis showed no clear fracture with mild degenerative changes. Ultrasound, CT, and MRI pelvis were done and compared to the previous studies that were done in 2014 outside the hospital. They showed that the patient had endometriosis with a lesion at the retro iliopsoas location suggestive of atypical location of endometriosis involving the iliacus muscle and femoral nerve.

A CT-guided biopsy from the right iliac mass was done and examined histopathologically as well as microbiologically. Histopathological examination showed pelvic endometriosis while the microbiological examination was unremarkable.

The final diagnosis was endometriosis with metastases to the right iliacus muscle as well as iliopsoas muscle invasion. Gynecology consultation was done to evaluate the endometriosis and to rule out any malignancy. Pap and cervical smears as well as endometrial biopsy were done and showed no malignancy cell.

Declaration of patient consent:

Approval of the study was obtained from National Guard Hospital (Jeddah, Saudi Arabia) academic and ethical committee. The patient and her relatives were informed that the case was taken as a case report for publishing and she was accepted. This work has been carried out following .

The Code of Ethics of the World Medical Association (Declaration of Helsinki) for studies involving humans.



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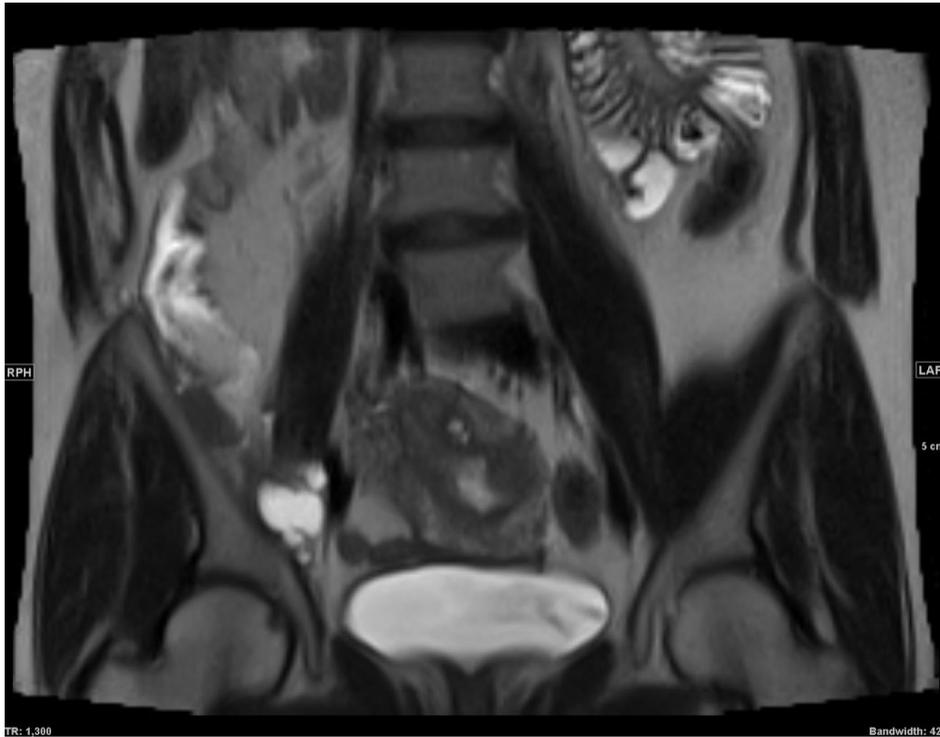


Fig. (1): MRI coronal cut of the pelvis, showed right iliac soft tissue mass.

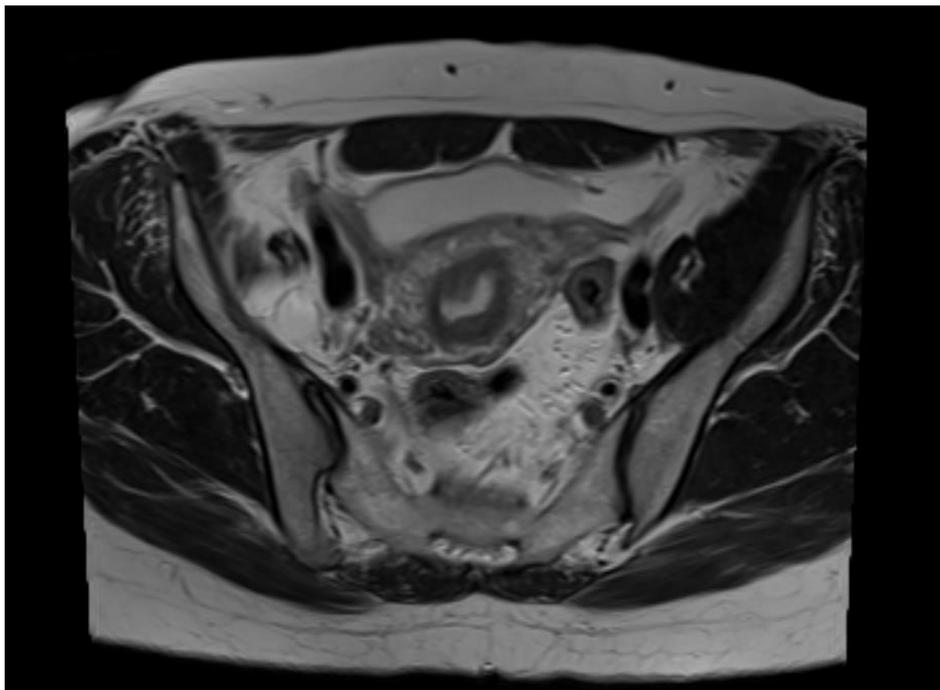


Fig. (2): MRI, axial cut of the pelvis showed right iliac soft tissue mass invading the iliacus muscle and iliopsoas muscle.

DISCUSSION

Deep endometriosis occurs in 14.4% of females with endometriosis and is characteristically multifocal. The commonly affected areas are uterosacral ligaments, vaginal fornix, rectovaginal septum, parametria, pouch of Douglas, rectum, rectosigmoid, bladder, ureter, and vesicouterine fold⁽³⁾.

Infrequently, endometriotic lesions may spread to other anatomic areas such as the abdominal wall, umbilicus, inguinal region, round ligament, thorax, and appendix⁽⁴⁾.

Endometriosis affects the ovaries (up to 88%), the ligaments of the uterus, fallopian tubes, the cervical-vaginal area, urinary tract, and rectum; it also can invade the pleura, lung, groin, umbilicus, diaphragm, sciatic nerve, external ear, scalp, and other parts of the body. The cause of endometriosis is still not clear^(5,6).

Clinical manifestations of abdominal endometriosis are often accompanied by cyclical changes in symptoms. Imaging, such as ultrasound, computed tomography, or MRI, plays an important role in diagnosis and evaluation⁽⁷⁾.

Bhat et al.⁽⁴⁾ published a report concluding that retroperitoneal endometriosis and psoas muscle presenting with deformity and pain in the hip may mimic a psoas abscess.

In the current case, after taking full detailed history with serial examination and investigation. She was diagnosed with endometriosis and treated with laparoscopic surgery outside the country. After the surgery, she is continued to follow with the gynecology team for 3 years. In 2017 the patient had an episode of low back pain with bilateral hip pain as well as right trochanteric hip pain, associated with loss of weight and loss of appetite, and irregular menstrual cycle.

After discussion of the case with the tumor board in the hospital, the decision was to do wide marginal excision of the tumor in the right iliac soft tissue. The operation was done in 2017 outside the country and she came for follow-up after 1 year.

There is a high rate of recurrence of symptoms after endometriosis surgery, annually as high as 10%⁽⁸⁾.

In the current case, she is followed by the Orthopedic Department since 2019, and she is doing fine, can ambulate without any assistant with no history of recurrence.

CONCLUSION

Deep endometriosis is rare to infiltrate the retrosoas area (iliacus, iliopsoas) and the diagnosis can be difficult, therefore a comprehensive patient assessment is necessary for adequate treatment. The use of appropriate imaging techniques, such as MRI and CT scan, is essential to show the lesions.

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