

**RECTUS ABDOMINIS MUSCLE ENDOMETRIOSIS FOLLOWING CESAREAN SECTION: A CASE REPORT**Abdellah Babahabib<sup>1,2</sup>, Mounir Moukit\*<sup>1</sup>, El Mehdi El Hassani<sup>1,2</sup>, Jaouad Kouach<sup>1,2</sup> and Driss Moussaoui<sup>1,2</sup><sup>1</sup>Department of Obstetrics and Gynecology, Military Training Hospital Mohammed V, Rabat, Morocco.<sup>2</sup>Faculty of Medicine and Pharmacy, University Mohammed V, Rabat, Morocco.**\*Corresponding Author: Mounir Moukit**

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**ABSTRACT**

We present a case of a 29-year-old woman presenting with a painful mass adjacent to the right lateral edge of her cesarean scar. Ultrasound and Magnetic Resonance Imaging were suggestive of a rectus abdominis muscle endometriosis. Wide excision of the mass was done and sent for histopathological examination confirming the diagnosis of endometriosis.

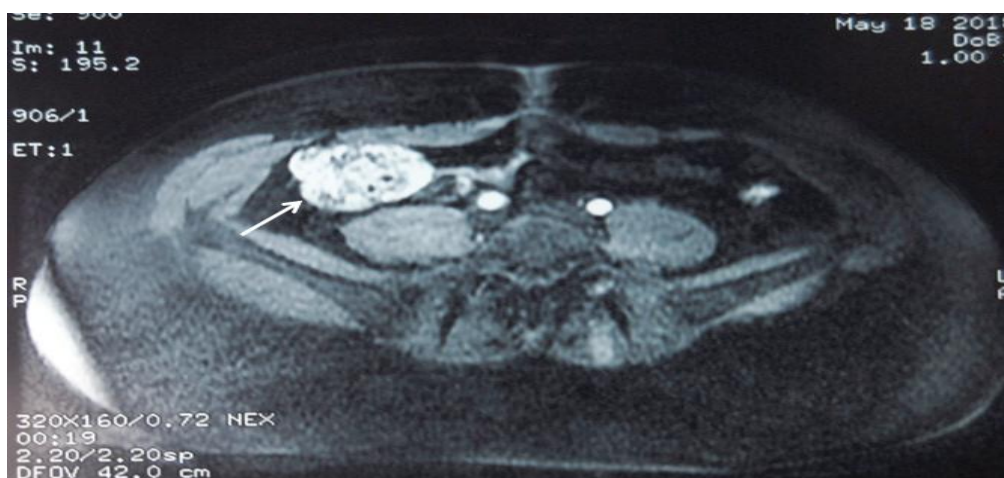
**KEYWORDS:** Rectus abdominis muscle; endometriosis; cesarean section, wide excision.**INTRODUCTION**

Endometriosis is a common gynecological disease in women of reproductive age defined as the presence of functional endometrial tissue outside the uterine cavity. It can be located in almost any organ. The rectus abdominis muscle is an exceptional site of endometriosis and only a few cases have been described to date. The authors report a rare case of rectus abdominis muscle endometriosis following cesarean section in a 29-year-old woman with a brief literature review.

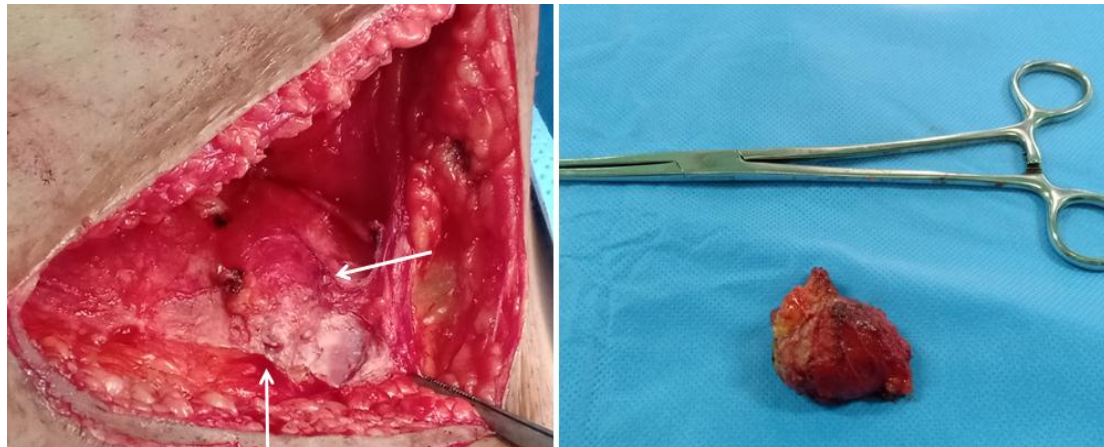
**CASE REPORT**

A 29-year-old Moroccan woman presented in our department for a painful mass at the cesarean scar appeared seven months before. Initially pain was cyclical then it has become persistent. She had a previous history

of cesarean section two years ago and she did not suffer from dysmenorrhea, pelvic pain or dyspareunia. Clinical examination objectified a tender palpable mass, measuring 4 cm in diameter, adjacent to the right lateral edge of her cesarean scar. Ultrasound revealed a hypo-echogenic lesion infiltrating the adjacent tissue with moderate vascularity in Color Doppler. Abdomino-pelvic Magnetic Resonance Imaging (MRI) showed a heterogeneous mass in the lower right rectus abdominis muscle suggestive of endometriosis (Fig. 1). There were no other lesions of pelvic endometriosis. Under spinal anesthesia, wide excision of the mass with clear margins was done (Fig. 2) and sent for histopathological examination confirming the diagnosis of endometriosis. On follow-up her symptoms have completely resolved.



**Fig. 1:** MRI evidenced a heterogeneous lesion in the lower right rectus abdominis muscle (white arrow) with focal areas of high and low signal intensity.



**Fig. 2: Peroperative view of the endometriotic lesion (white arrows).**

## DISCUSSION

Rectus abdominis muscle endometriosis was first described by Amato and Levitt in 1984.<sup>[1]</sup> The majority of reported cases are associated with operations in which uterus is opened, due to iatrogenic transfer of endometrial cells into the muscle.<sup>[2]</sup> When stimulated by estrogens, these cells may proliferate until they become symptomatic. The lymphatic and vascular migration theory was also advocated in patients without a previous surgical history.<sup>[3]</sup> Common symptoms include palpable mass and/or pain.<sup>[2]</sup> The catamenial character of symptoms is an important diagnostic criterion, but it is present in only a few cases. Lesions generally vary in size from 2 to 7 cm with a mean diameter of 4 cm.<sup>[2]</sup> Various imaging techniques are able to give correct preoperative diagnosis but lack specificity. According to Hensen et al, ultrasound is the most accessible imaging modality, allowing, along with physical examination - a differential diagnosis with incisional hernia, hematoma, abscess, or sebaceous cyst in most cases.<sup>[4]</sup> Radiological findings of Computed Tomography scan and MRI depend on the phase of menstrual cycle, the proportion of stromal and glandular elements, amount of bleeding and surrounding inflammatory response. They are very useful in cases where involvement of rectus abdominis muscle, as was in the present case. Preoperative diagnosis could be made by means of fine-needle aspiration cytology (FNAC) or excision biopsy. Hensen et al. reported six cases of abdominal wall endometriosis where a definitive diagnosis was obtained in all patients by FNAC.<sup>[4]</sup> Theoretically, this procedure has the potential to increased risk of producing new endometriotic implants at the puncture site, especially within concomitant pelvic endometriosis, although this has not been reported. The best treatment option is wide excision of the endometrioma with clear margins, 5 to 10 mm of the surrounding healthy tissue, which is both diagnostic and therapeutic. Recurrence after resection is exceptional and it is often due to incomplete excision.<sup>[5]</sup> Medical management using progesterone, Danazol, or gonadotropin-releasing hormone (GnRH) analogue might be a different approach for this entity and can reduce clinical symptoms and size of the nodule

temporarily.<sup>[6]</sup> However, after the cessation of hormonal therapy, it is likely that the symptoms will reoccur.

## CONCLUSION

Rectus abdominis muscle endometriosis must be considered in woman with a previous history of gynecological surgery presenting with abdominal wall mass or pain. Wide surgical resection is recommended to avoid recurrence.

**Conflicts of interest:** None declared.

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