Abdominal Scar Endometriosis

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Abstract Abdominal scar endometriosis is very rare. We report a case of abdominal scar endometriosis in a 32-year-old woman presented with a blue lesion over the abdominal scar for 7 months. She had history of intermittent dull aching pain over the scar for 5 years. Excision of the lump was done with the clinical diagnosis of vascular malformation over the scar. The specimen was sent for histopathological examination. The histopathological report revealed decidual change in the scar tissue suggesting abdominal scar endometriosis. Abdominal scar endometriosis should be kept in mind while dealing a case of the painful lump over the abdominal scar in any woman of childbearing age having a history of obstetric or gynecological procedure.

Keywords Abdominal scar · Decidual change · Endometriosis

Introduction

Endometriosis is defined as the presence of endometrial tissue outside the uterine cavity [1]. Endometriosis

occurs more commonly in the abdominal cavity in 0.03–1 % of women with previous surgery in the uterus [2, 3]. Endometriosis of the skin and soft tissue makes up to 3.5 % of cases of extrapelvic endometriosis, with majority of such cases occurring in surgical scar following operations on the uterus [4]. The disease is characterized by local aggressiveness, and the risk of recurrence requires both surgical and hormonal treatments. Therefore, although it is a benign, it may be considered a kind of true neoplastic process [5]. The diagnosis is often a pitfall as patients are usually diagnosed as having hematoma, granuloma, keloid, incisional hernia, and vascular malformation. Scar endometriosis should be suspected while dealing with such types of cases. Again we are presenting this case because of its rarity.

Case Report

A 32-year-old pregnant woman presented with a bluish lesion over a part of her abdominal scar (Fig. 1) for past 7 months. She was having intermittent dull aching pain over the scar for past 5 years. She had history of cesarean section 6 years back. The mass did not respond well to usual medicinal treatment for which excisional biopsy was undertaken involving the mass with the clinical diagnosis of vascular malformation or malignant change over the scar. The specimen was sent for histopathological study. The histopathological report revealed decidual change over the scar tissue (Fig. 2) suggesting abdominal scar endometriosis. The postoperative course was uneventful. During the time of the second cesarean section after 2 months, wide excision of the scar involving the deep layer tissue was done. The patient showed no evidence of local recurrence

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Fig. 1 Showing a small discolored nodule in the abdominal scar

after the resection and continues to be under close follow-up.

Discussion

Abdominal scar endometriosis is a gynecological pathology that often presents to the general surgeon rather than the gynecologist. Since it is a rare entity, abdominal scar endometriosis should be kept in mind in any woman of childbearing age complaining of a cyclical painful mass in a scar following a previous obstetric or gynecological procedure [6]. Endometriosis results due to direct implantation of viable endometrial cell, in the subcutaneous or subfacial planes exposed by the surgical incision on the abdominal wall [7]. Although spillage of endometrial cells into the surgical incision probably occurs quite frequently during gynecological or obstetric surgery, endometriosis occurs with much lower frequency. This implies that factors such as environmental, genetic, immune system (cellular and humoral), and hormonal (estrogen) abnormalities may confer susceptibility to the development of endometriosis in some people [7]. These cellular and humoral factors are due to the ability of the endometrial cell to regulate the cytotoxic immune activity and their capability to resist immune-mediated apoptosis [8]. These phenomena enable the survival of ectopic endometrial cells [8].

Scar endometriosis presents as a painful slow-growing mass. This mass results from cycles of bleeding and local inflammatory response. All these patients have uterine

procedures prior to their presentation. These patients are referred to the surgeon as infective granuloma, keloid, rectus hematoma, and incisional hernia.

In our case she had dull, aching intermittent pain for 5 years over a focal area of the scar which might be cyclical but that could not strike to the clinician's mind as the patient could not give proper history. Again the bluish color could be due to increased vascularity or vasodilatation during pregnancy, and change in size may be due to increased decidual changes as pregnancy advances. Preoperative diagnosis of scar endometriosis is possible with fine-needle aspiration cytology [4]. Imaging studies are helpful in identifying the exact anatomical location of the lesion and excluding other surgical conditions [2]. Our patient was not investigated with these.

Exploration with wide excision remains the treatment of choice for abdominal scar endometriosis when it is suspected, to prevent its recurrence. Scar endometriosis can undergo malignant change [9].

Conclusion

Scar endometriosis should be kept in mind in all premenopausal women presenting with cyclical pain over abdominal scar following a previous obstetric or gynecological procedures. Again proper caution should be taken during gynecological or obstetrical procedures to avoid endometrial transplantation to the abdominal wall.

Fig. 2 Biopsy specimen from the bluish colored nodule on the abdominal scar, showing decidualisation of the endometrial stroma without endometrial gland. (H&E x 200)

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References

1. Antonelli A, Simeone C, Zani D, Sacconi T, Minini G et al (2006) Clinical aspects and surgical treatment of urinary tract endometriosis. Our experience with 31 cases. *Eur Urol* 49:1093–1097
2. Olive DL, Schwartz LB (1993) Endometriosis. *N Engl J Med* 328:1759–1769
3. Clement PB (1990) Pathology of endometriosis. *Pathol Annu* 25:245–295
4. Honore GM (1999) Extra pelvic endometriosis. *Clin Obstet Gynecol* 42:699–711
5. Van Gorp T, Amant F, Neven P, Vergote I (2004) Endometriosis and the development of malignant tumours of the pelvis: A review of literature. *Best Pract Clin Obstet Gynecol* 18:349–371
6. Villalta J, Custarday AL, Carrasquev JA, Pujala M, Gambo P (2006) Endometriosis in a laprotomic scar after cesarean section: report of two cases. *Cir Esp* 79(5):313–315
7. Seli E, Berkkanoglu M, Arichi A (2003) Pathogenesis of endometriosis. *Obstet Gynecol Clin North Am* 30:40–61
8. Wicherek L, Dutsch-Wicherek M, Galazka K, Banas T, Popeila T, Lazar A, Kleinrok-Podsindlo B (2006) Comparision of RCASI and metallothionein expression and the presence and activity of immune cells in human ovarian and abdominal wall endometriomas. *Reprod Biol Endocrinol* 4:41
9. Alberto VO, Lynch M, Labbei FN, Jeffers M (2006) Primary abdominal wall clear cell carcinoma arising in caesarean section scar endometriosis. *Ir J Med Sci* 175:69–71