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Cutaneous endometriosis

Surgical presentations of a gynaecological condition

Endometriosis is a common gynaecological condition; cutaneous endometriosis is a subtype of endometriosis. Although cutaneous endometriosis involving the abdominal wall is not common, preoperative diagnosis of cutaneous endometriosis can be easily mistaken for a suture granuloma, lipoma, abscess, cyst or hernia.¹ We report two common surgical presentations of this gynaecological condition.

Case 1 – spontaneous umbilical endometriosis

A nulliparous woman, 43 years of age, presented with a slowly enlarging umbilical nodule over a period of 10 years. Her lesion was discharging, bleeding and causing intermittent pain over the past 8 months. She had never been pregnant nor had any abdominal surgery. On physical examination, she had a hard, irreducible umbilical mass that measured 2 cm in diameter. Ultrasound of the mass showed a well defined, oval shaped anechoic area. The preliminary diagnosis was incarcerated umbilical hernia.

During surgery, a piece of irregular, rubbery tissue mass with flecks of dark tan material was completely excised from the abdominal wall superficial to the rectus muscle. Histologic examination showed endometriosis. At follow up, the patient reported symptoms suggesting endometriosis before surgery. The patient was subsequently referred to a gynaecologist for further opinion and management.

Case 2 – surgical scar endometriosis

A woman, 27 years of age, presented with a 2 month history of intermittent pain at her abdominal scar from a caesarean section 3 years earlier. On examination, she had a tender nodule measured 1 cm to the right of her Pfannenstiel scar. Ultrasound of the nodule suggested stitch abscess. Preoperative differential diagnoses included suture granuloma and endometrioma. At operation, a nodule that contained dark serous fluid was removed superficial to the fascia. Histopathologic evaluation confirmed surgical scar endometriosis, possibly secondary to the caesarean section.

Discussion

Endometriosis is the abnormal growth of endometrial glands and stroma outside the uterine cavity and musculature. It is estimated to affect 15% of women of reproductive age, and up to 50% of infertile women.¹

Extrapelvic endometriosis refers to endometriosis found at body sites other than the pelvis. It can involve almost every organ in the human body. Overall, the incidence of extrapelvic disease represents 8.9% of reported cases of endometriosis with a mean age of presentation of 34 years.²

Cutaneous endometriosis

Cutaneous endometriosis is a subtype of extrapelvic endometriosis. Common presentations include palpable mass, cyclic pain, bleeding and discharge. These symptoms are the consequence of extravasation of blood and menstrual debris from the endometrial glands into surrounding tissue. It is interesting to note that patients presenting with these symptoms – similar to some general surgical conditions – are commonly referred to a general surgeon but not a gynaecologist.² Several theories exist for the development of cutaneous endometriosis,

including metaplasia, venous or lymphatic metastasis and mechanical transplantation.³ Cutaneous endometriosis can be associated with surgical scars or spontaneous occurrence.

Aetiology of cutaneous endometriosis is probably transplantation of viable endometrial cells into scars at the time of surgery. Its occurrence has also been well documented in incisions of any type where there has been possible contact with endometrial tissue, including episiotomy, hysterotomy, ectopic pregnancy, laparoscopy, tubal ligation, and caesarean section. The true incidence of caesarean section scar endometrioma is difficult to determine, but is estimated at 0.03–0.15%² with the mean period between the procedure and symptoms starting around 5 years.⁴

The prevalence rate of spontaneous cutaneous endometriosis is 0.5–1.0% of all patients with extragenital endometriosis.² Although clinical diagnosis can be difficult, it should be suspected in any woman with a nodule near the umbilicus who presents with pain, itch, odour and bleeding associated with the menstrual cycle. Spontaneous cutaneous endometriosis is thought to arise from transport of endometrial cells from pelvis via lymphatic and vascular channels, or arise through metaplasia of urachus remnants.⁴

Diagnosis is commonly made by histopathology. Histological examination reveals ectopic endometrial glands with surrounding cellular stroma, occasionally associated with extravasation of erythrocytes in the stroma and some acute inflammatory infiltrates around the glands.⁵

Management includes both surgery and hormone suppression.⁶ The combined oral contraceptive pill, progestogens and gonadotropin releasing hormone analogues have been attempted. Only short term success in alleviation of symptoms has been achieved and recurrence is common after cessation of therapy.¹ Extensive surgical excision, including the adjacent fascia or skin if necessary, is the treatment of choice. Local recurrence after adequate surgical excision is not common. When it recurs, it is likely to be a result of inadequate excision.² Simultaneous laparoscopy and hormone therapy for diagnosis

of a coexisting pelvic endometriosis is only indicated in cases with recurrent symptoms.²

Conflict of interest: none declared.

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