

Case Report

A case report on Spontaneous Abdominal Wall Endometriosis

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Abstract:

Endometriosis is the presence of endometrial glands and stroma outside the uterus. Endometriosis is the commonest gynaecological problem; it affects 7 to 10% women in reproductive age group. Spontaneous abdominal wall endometriosis (AWE) is any ectopic endometrium found superficial to the peritoneum without the presence of any previous scar. In our case study, though the patient had a caesarean section, the endometriosis developed in unscarred area. It was located below the umbilicus in the midline, which is a common site for spontaneous abdominal endometriomas. Initially the patient had cyclic infra-umbilical pain, gradually it became constant and severe. Due to irregular follow up and unusual site and presentation of the lesion, it took a long time to diagnose the condition. During operation the mass was spotted in the midline and extend up to the peritoneum. It was taken out by wide local excision. Pathology revealed endometrial glands surrounded by a disintegrating mantle of endometrial stroma and fibrous scar tissue in which there was a scattering of leucocytes. Spontaneous AWE is rare, accounting for 20% of all AWEs. Spontaneous endometriomas are usually diagnosed by pathology and the treatment of choice is surgical excision.

Keywords: Abdominal wall mass; Endometrioma; spontaneous abdominal was endometriosis.

Introduction:

Endometriosis is defined as ectopic growth of endometrial gland and stroma outside the uterus, causing infertility, pelvic pain, menstrual abnormalities and dyspareunia¹. It is one of the most ubiquitous and enigmatic diseases. It is a common gynaecological condition that affects up to 22% of all women, 8-15% of reproductive age and 6% premenopausal women²⁻³. Endometriosis commonly found anywhere in the pelvic cavity: on the ovaries, fallopian tube, uterosacral ligaments, pouch of Douglas⁴. Extra pelvic location of endometriosis is relatively rare. The presence of endometriosis in surgical site known as scar endometrioma. In abdominal wall it is a rare condition, in most cases found following previous caesarean section or pelvic surgery⁵. The incidence of scar endometrioma is estimated to 0.03%-1.5% of all women with previous caesarean delivery⁶. Spontaneous abdominal wall endometriosis (AWE) represents an ectopic functional endometrial tissue situated superficial to peritoneum unrelated to scar, accounting for 20% of all abdominal wall endometriosis⁷. The relative rarity of this condition and many diagnostic pitfalls are the main reasons for a significant delay from the onset of symptoms to accurate diagnosis and therapy. The triad; mass, pain and cyclic symptomatology helps in the diagnosis, but unfortunately it is not present in all cases.

Case Report

A 36-year-old Para 1, Bangladeshi woman presented to a private clinic with 14 years history of focal dull aching pain located in hypogastric area below the umbilicus. She stated that the pain was cyclical and related with her menstruation when it started 14 years back, immediately following her caesarean section. Her menstrual cycle was regular with average flow and duration. As she was a divorced, single lady, she did not practice any contraceptive method. She took gynaecological opinion and was diagnosed as a case of endometriosis on the basis of her symptoms. She was given cyclical Progesterone and underwent diagnostic laparoscopy in 2015. During laparoscopy no focal lesion was found, adhesiolysis and appendectomy was performed. Gradually the pain became severe and persisted throughout her cycle. She had to take NSAID along with progesterone. A physician in another clinic performed ultrasonography (USG) and MRI. At that time, MRI (magnetic resonance imaging) revealed a suspected hernia in infra-umbilical area. Later on subsequent ultrasound nullified this finding and revealed a mixed echogenic cystic lesion of about 2.8 × 1.5 cm in her infra umbilical region. This finding was ignored by that physician probably due to unusual site and presentation of the lesion.



Figure-1: Collected menstrual blood in infra-umbilical region

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Figure-2: Endometrioma



Figure-3: Abdominal ultrasound showing mixed echogenic focal area in the deeper part of subcutaneous layer; extended to right lower rectus sheath

When she came to my clinic I examined her and found a diffuse mass like feeling below the umbilicus. Considering her history, examination and previous scan findings ectopic endometrioma was suspected and confirmed by repeat ultrasound.

For non-pelvic endometriosis surgery is the treatment of choice. So exploration (under spinal anaesthesia) with a midline longitudinal incision was performed below the umbilicus. During dissection of fatty tissue, the stored chocolate materials were found (Fig. 1), then a firm nodular mass (approximately 5 × 3cm) was spotted which extend up to the rectus sheath and peritoneum, then all involved area were excised (Fig. 2). Rectus sheath was closed by Proline 2/0. A drain tube was kept for several days. Her postoperative period was uneventful. She got injection Cefuroxime 750mg IV at the time of induction of anaesthesia and continued for seven days postoperatively and IV Paracetamol 1gm-BD for one day.

Discussion:

Spontaneous abdominal wall endometriosis is presence of ectopic endometrium found superficial to peritoneum without the existence of any previous scar⁸. It is a rare entity,

accounting for 20% of all abdominal wall endometriosis⁷. In our case though the patient had a history of caesarean section the lesion was unrelated to scar area. Different pathophysiological theories concerning the origin of endometriosis have been proposed, including the implantation or reflux, direct extension, coelomic metaplasia, induction, and lymphatic and vascular metastasis.⁹ Lymphatic spread has been suggested for spontaneous endometriosis based on the demonstration of lymphatics between the pelvis and umbilicus.⁹ The most common site of spontaneous endometriosis is the umbilicus, followed by the inguinal area and the abdominal wall¹⁰. Diagnostic failure was challenges encountered during case study due to atypical clinical presentation and nonspecific results of imaging techniques, in our case it took 14 years to diagnose the case from its initial presentation. Other authors report on correct preoperative diagnosis in 20%-50% of cases¹¹⁻¹². This could be due to irregular follow-up, atypical site and presentation. However, this diagnostic dilemma can be overcome by high index of clinical suspicion and histopathology.

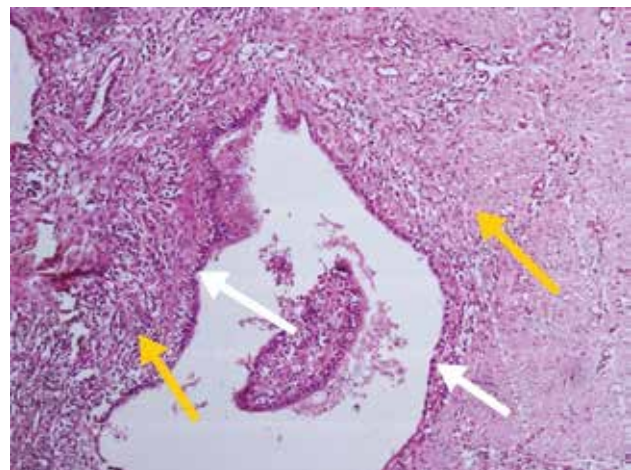


Figure-4: White arrow indicates Endometrial Epithelium and Yellow arrow indicates Endometrial Stroma

Definitive treatment option for non-pelvic endometriosis is surgical excision. Hormonal therapy in the form of gonadotropin-releasing hormone agonists, oral contraceptives and danazol may be given preoperatively to reduce the size of lesions and ameliorate symptoms consistent with pelvic endometriosis⁸. Local recurrence after adequate surgical excision is rare. Malignant transformation has been described.⁹ Subsequent gynaecological evaluation for pelvic endometriosis is recommended for all patients. Around 15% of patients will have coexistent pelvic endometriosis¹³.

Conclusion:

Although spontaneous cutaneous endometriosis remains a rare phenomenon, can lead to significant morbidity and many diagnostic pitfalls. Like any other chronic disease, long-term misdiagnosis can lead to significant impairment of the quality of life, not only social and professional part, but psychosexual as well. It should always be kept in mind when treating females who present with recurrent cyclic abdominal pain. Therefore definitive management and cure is provided by

surgery with minimal consequences. And diagnostic dilemma could be overcome by high index of clinical suspicion and histopathology.

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