

A case report on rectus abdominis muscle endometriosis

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Abstract

Endometriosis is the presence of endometrial glands and stroma outside the uterine cavity. The ectopic endometrial tissue usually present in pelvic viscera and peritoneum, but it can present anywhere in the body. Abdominal wall endometriosis is rare, here we report a case of two previous lower segment cesarean section presented to gynaecology OPD with mass abdomen nearly 1cm superior to Pfannenstiel incision that was diagnosed as endometriosis by fine needle biopsy and excisional biopsy.

Keywords: rectus abdominis, endometriosis

Introduction

Endometriosis is caused by presence of endometrial glands and stroma outside the uterine cavity, endometriosis is most commonly seen in women of reproductive age but it is also seen in adolescents and postmenopausal women on HRT [1]. It was first described by Carl Von Rokitansky in 1860. Prevalence of endometriosis was around 10% [2, 3]. It is most commonly seen in ovaries, sacrouterine ligaments, pelvic peritoneum, and less commonly seen in vulva, vagina, appendix, umbilicus, bladder [4]. Isolated abdominal wall endometriosis is very uncommon, majority of them are associated with previous surgical procedures

Several theories have been proposed for endometriosis chief among them are the three 1. Ectopic transplantation of endometrial tissue 2. Coelomic metaplasia 3. The induction theory [5]

Extrapelvic endometriosis very rare 1-2% may result from vascular or lymphatic dissemination of endometrial cells to gynaecologic and non-gynaecologic sites like surgical scars, extremities, umbilicus [6] Treatment of extra genital endometriosis will depend on the site. Abdominal wall and perineal endometriosis is usually treated by complete excision of nodule [7]

Case Report

A 32 year old P₂L₂ with two previous lower segment caesarean sections, last C section 7 years back came to gynecology OPD with complaints of cyclical lower abdominal pain and mass per abdomen since 1 year

On examination 4x4 cm palpable mass felt 2cm above Pfannenstiel incision on medial aspect of left rectus abdominis muscle.

Ultrasonography was done suggestive of 4.2x1.9cm heterogeneously hypo echoic lesion in muscular plane with internal vascularity suggesting endometriosis

MRI Pelvis shows minimal free fluid in pelvis, T1, T2 heterogenous mixed intensity lesion of 2.8x2.2cm in left rectus muscle in lower abdomen suggestive of endometriosis USG guided FNAC showed clusters and sheets of round to oval epithelial cells with focal microglandular structures, background shows pigment laden

Macrophages and blood cellular elements suggestive of endometriosis

Case was posted for excision of mass under spinal anesthesia, Pfannenstiel incision was given, a 5x5 cm diameter mass was located on left rectus muscle, mass was excised and sent for HPE

HPE of excised mass showed features consistent with endometriosis with adjacent tissue showing stromal reaction post-operative period was uneventful the patient is still under followup.



Fig 1



Fig 2

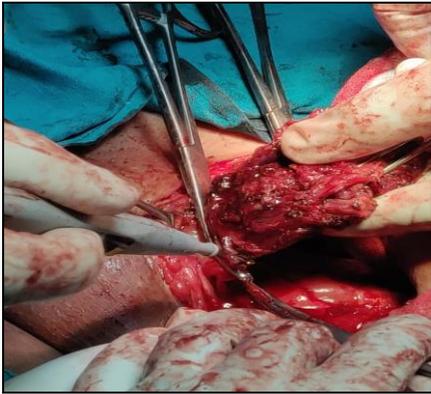


Fig 3



Fig 4

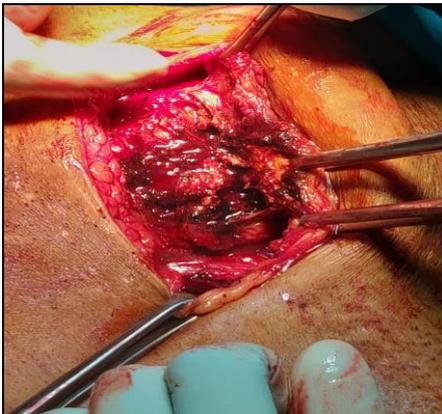


Fig 5



Fig 6

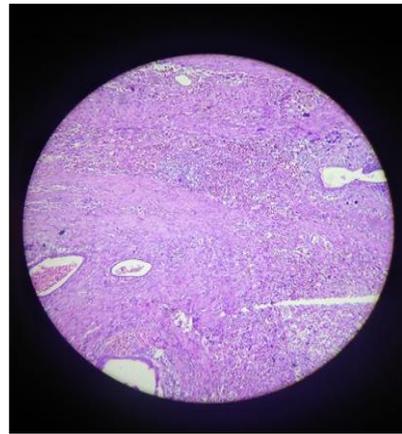


Fig 7

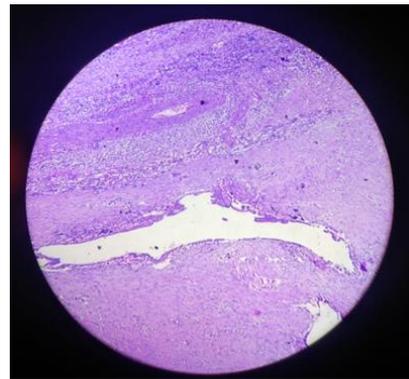


Fig 8

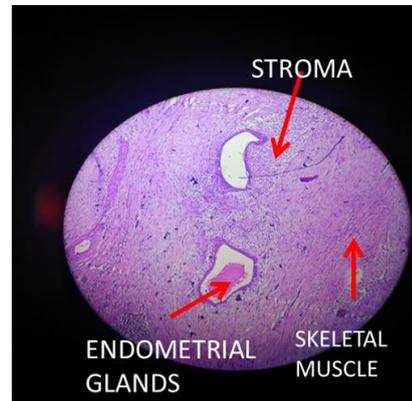


Fig 9

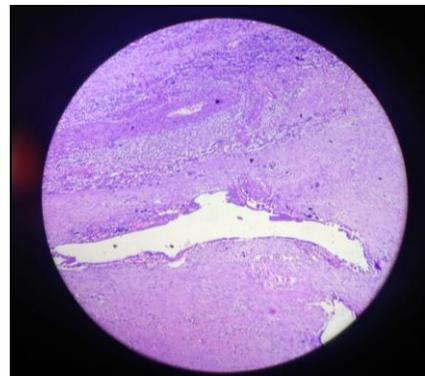


Fig 10



Fig 11

Discussion

Endometriosis developing in the skin and subcutaneous tissue of old incision scar emerge as a result of iatrogenic implantation of endometrial cells during gynaecological surgery Endometriosis localized in rectus abdominis is rare. Although many theories have been suggested about formation of endometriosis one of the most popular theories for extra genital endometriosis is theory of vascular spread. According to this theory endometrial cells reach extra genital regions through blood vessels or lymphatic system resulting in endometriosis Development of primary rectus abdominis muscle endometriosis can be explained by this theory

In our case although she had previous history of caesarean sections the case can be considered as a spontaneous lesion as the lesion was away from the incision. In this case formation of endometriosis can be explained by vascular theory Concomitant pelvic endometriosis is seen in 25% of abdominal wall endometriosis and the patients should be considered in this respect.

In our case there is no evidence of endometriosis anywhere in the pelvic cavity.

Preoperative diagnosis of endometriosis is difficult, USG, CT, MRI are less valuable in the diagnosis of endometriosis Definitive diagnosis is can be made by pathological examination after biopsy or excision

Our case was diagnosed with ultrasound guided FNAC.

Conclusion

USG guided FNAC should be done in diagnosis of abdominal wall lesions if there complaints are related to menstrual cycle, to rule out endometriosis. USG guided needle biopsy is helpful both in diagnosing and guiding the surgeon during surgery

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