

## Rectus abdominis muscle endometriosis: Case report and review of the literature

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**Abstract:** Endometriosis is classically defined as the presence of functional endometrial glands and stroma outside the uterine cavity. [1][2]. Endometriosis is found predominantly in women of childbearing age. Overall prevalence, including both symptomatic and asymptomatic women, is estimated to be 5–10% [3][4].

**Keywords:** Endometriosis, rectus abdominis

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### I. Introduction

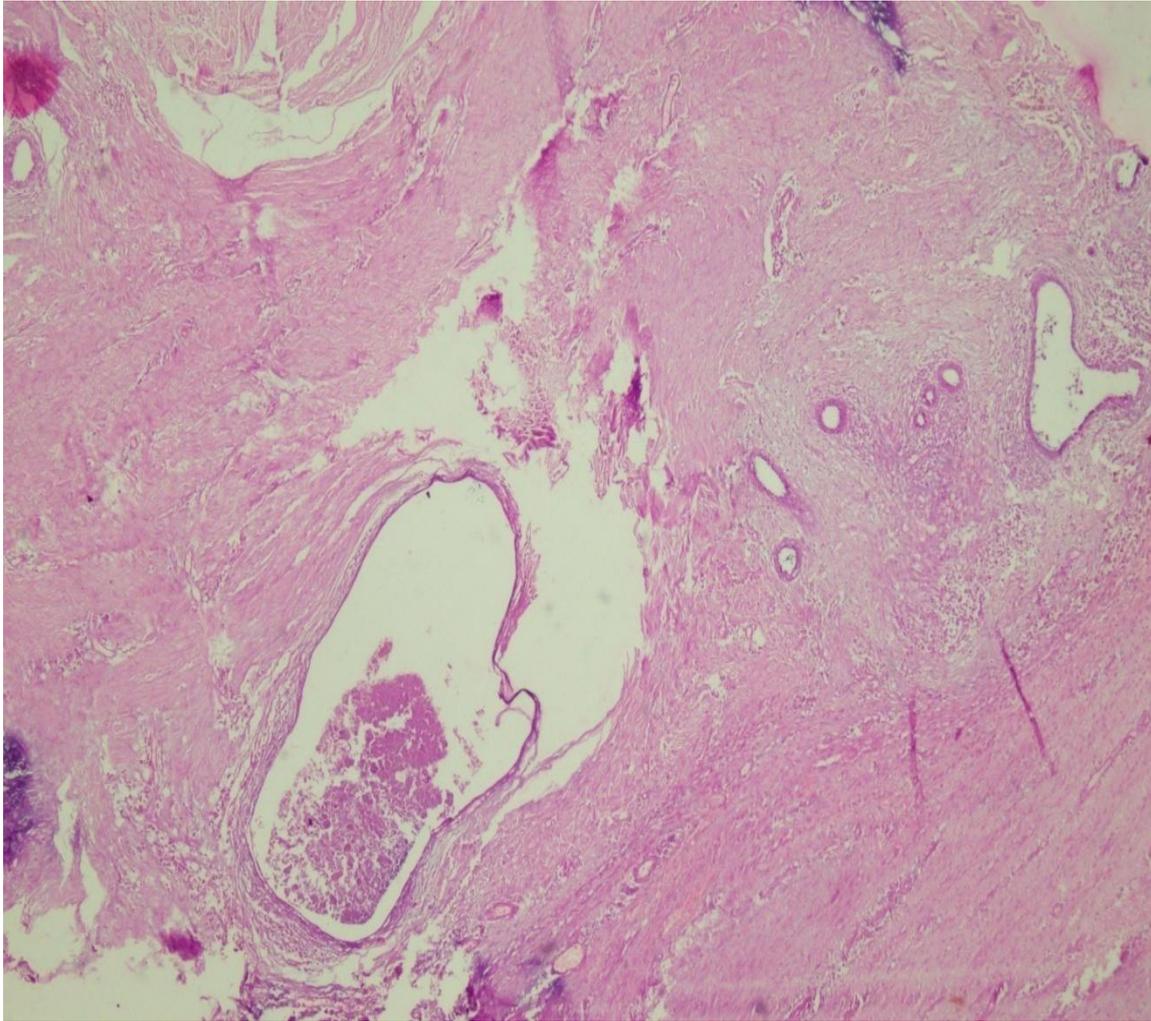
The extrapelvic implantation of endometrial tissue has been described in virtually every organ. Abdominal wall endometriosis is any ectopic endometrium found superficial to the peritoneum. This definition includes lesions that were not a result of a previous surgical procedure[5]. We present a case of 34 year old female in whom endometriosis was found in the rectus abdominis muscle and discuss the imaging findings and pathological correlation.

### II. Case Report

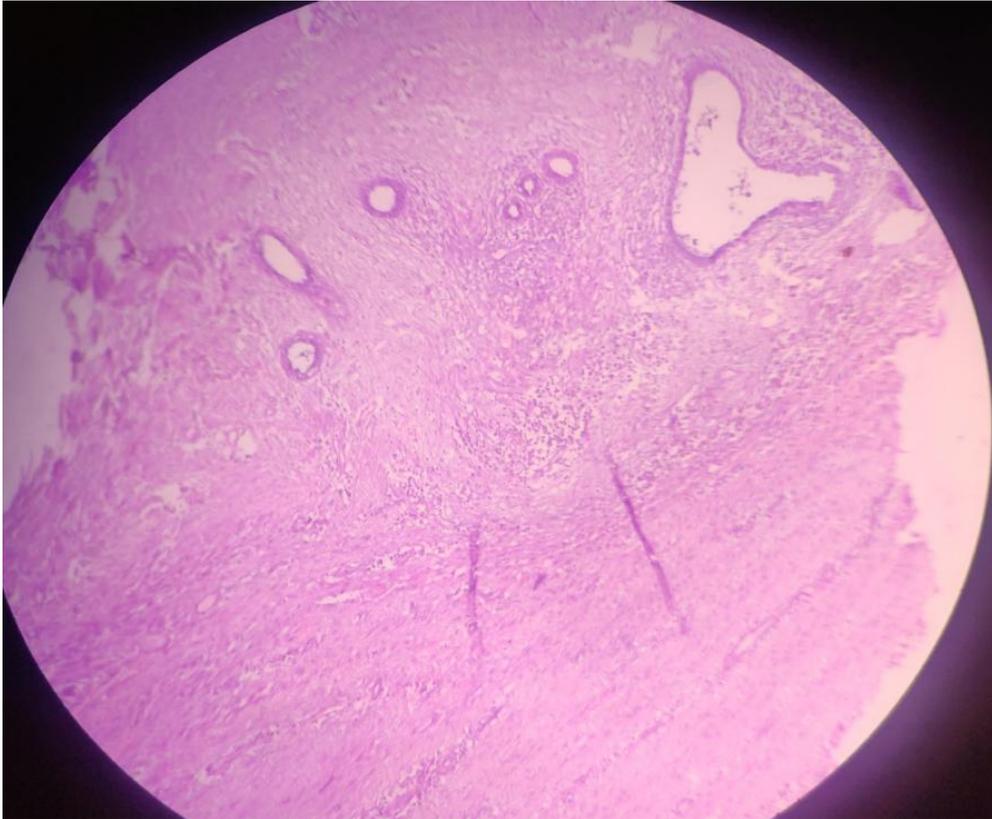
A 34 year old female presented to OPD facility of GMC patiala with complaint of pain abdomen. Her personal history for previous surgery and for pelvic endometriosis was negative. MRI scan confirmed the presence of ill defined mass measuring 4.2x4.0x2.35 cm localised in right rectus abdominis muscle with some evidence of infiltration into surrounding structures.

### III. Pathological features

A brown coloured globular soft tissue piece with attached fibrofatty tissue was excised measuring 8x6.5x2 cm. Cut section showed brown areas and a firm white area measuring 2x2 cm Histological examination revealed areas of typical endometrial glands surrounded by stroma with occasional foci of haemosiderin-laden macrophages typical of endometriosis along with inflammatory infiltrate spreading to surrounding adipose tissue and skeletal muscle bundles.



**Figure 1:**Endometrial glands and stroma in muscle (H&E 40X)



**Figure 2:**Endometrial glands and stroma in muscle (H&E 100X)

#### **IV. Discussion**

Endometriosis, a disorder afflicting as many as 5–10% of women of childbearing age, is defined as the presence of functional endometrial glands and stroma outside the uterine cavity [3,4,6]. Endometriosis is a complex disorder and its causes are probably multifactorial. The most widely accepted theory is that endometriosis results from retrograde menstruation [3,6]. Although generally confined to intrapelvic sites, such as ovaries, pelvic wall, or peritoneum, endometrial cells have been reported in the pleura, skin, lung, and skeletal muscles of the extremities [7,8]. Although most abdominal wall locations are confined to surgical scar or tracts resulting from previous surgical procedures [3,9], endometriosis of the abdominal wall may also arise in the absence of a history of surgical operations. The sonographic appearance of abdominal wall endometriosis can be cystic, polycystic, mixed, or solid. The ultrasound pattern may or may not correlate with the menstrual cycle; thus, the images are not specific [10,11]. The symptoms of the disease are cyclic or catamenial pain associated with a palpable mass. The differential diagnosis includes hernia, hematoma, lymphadenopathy, lymphoma, lipoma, abscess, subcutaneous cyst, neuroma, soft tissue sarcoma, desmoids tumor, or even metastatic cancer.[5]

#### **V. Conclusion**

We presented a rare case of rectus abdominis muscle endometriosis diagnosed pre operatively and confirmed by histopathology. The treatment of this exceptional condition should be surgical and this clinical entity must be included in the differential diagnosis of any abdominal mass in fertile female patients with or without surgical history.

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