

Case Report

A rare case of endometriosis in the canal of Nuck

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Introduction

The canal of Nuck is an embryological remnant of the patent processus vaginalis. Endometriosis is defined as the presence of endometrial gland and stroma outside the endometrial cavity and uterine musculature. Inguinal endometriosis can present as a rare tumour [1]. Endometrial deposition in the canal of Nuck is extremely rare and very few cases have been reported [2]. Endometriosis in the canal of Nuck is a real diagnostic challenge for clinicians as in this patient.

Case Report

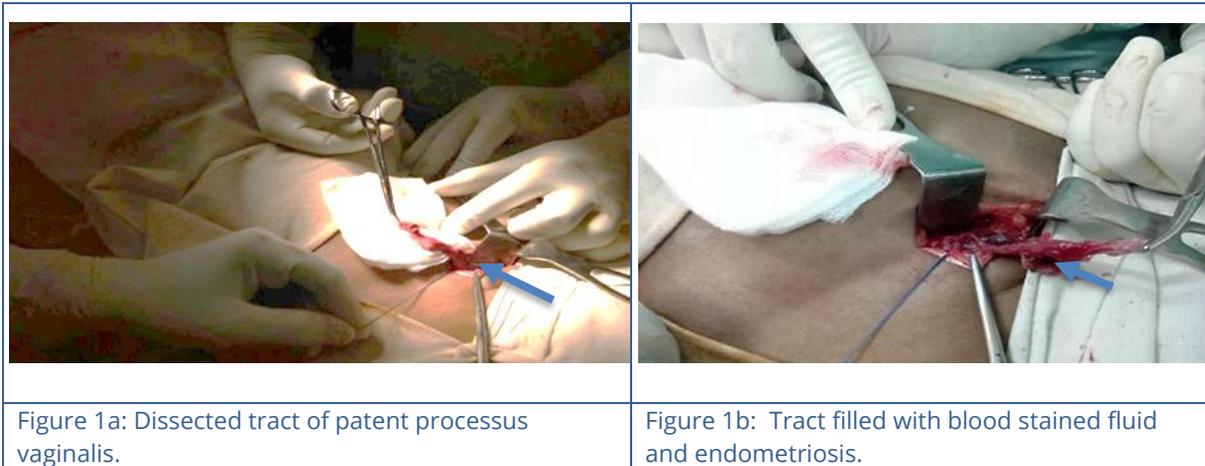
A 30-year-old sub-fertile woman presented with a lump in the right inguinal region for the last five months. The lump had been progressively increasing in size. She had lower abdominal pain during her menstrual period. She felt a dull aching pain over the swelling during her menstrual period. She observed that the size of the lump increases with exertion and that it is not present early in the morning when she wakes up. She had no other symptoms. Her past medical history was unremarkable and she is not on any medication. She is married for 3 years.

Physical examination revealed a cystic swelling with an expansile cough impulse in the right inguinal region. The swelling was reducible while lying down. Clinical diagnosis was made as a right sided inguinal hernia.

Sonographic examination revealed a subcutaneous, well defined, hyperechoic cystic mass measuring 2 x 0.5cm in dimension. There was another cystic lesion in the left side of the pelvis compatible with an ovarian cyst with ultrasonic features suggestive of a chocolate cyst.

The patient was prepared for right inguinal exploration. There was a sac with blood stained fluid in the canal of Nuck observed during surgery (Figure 1a & 1b). The sac was connected to the peritoneal cavity by a tiny tract. Even though the clinical diagnosis was a right inguinal hernia probably this was a patent processus vaginalis present since childhood. The excised sac was sent for histopathology and the contents revealed

endometriosis. She was referred to the Obstetric and Gynaecological Unit for further management of endometriosis and subfertility.



Discussion

Endometriosis is most commonly a disease of women [3]. A total of 16 cases of endometriosis in males has been reported [4]. It occurs mostly in the pelvis [3]. The common pelvic sites include the ovaries, uterosacral ligaments, fallopian tubes, pelvic peritoneum, pouch of Douglas and recto-sigmoid colon [3]. The most common site of endometriosis in the pelvic cavity is the ovary [3]. The rare sites of endometriosis include pleura, Caesarean section scar, umbilicus, perineum, vagina, diaphragm, limbs, kidney or inguinal canal (as in this patient) (3). The aetiology of endometriosis is unknown. . Malignant transformation to carcinoma has been reported in a very low percentage [1].

Inguinal canal endometriosis was first reported by Allen in 1896 [1]. Only a little more than 30 cases have been reported up to now [1]. Endometriosis of the canal of Nuck is an extremely rare condition. It may mimic inguinal hernia or any other cause of inguinal lumps. The preoperative diagnosis is usually challenging for the clinician. The atypical imaging features and non-diagnostic needle aspiration (FNAC) make the diagnosis more difficult [2].

MRI imaging may be more useful as a diagnostic tool in inguinal endometriosis to locate the lesion [2]. The sensitivity and specificity of MRI in diagnosing endometriosis have been reported as high as 90% and 98%, respectively. Surgical excision serves both a diagnostic and a therapeutic purpose.

Conclusion

Canal of Nuck or inguinal endometriosis is a rare clinical condition. It affects women in the reproductive age group who may or may not have concomitant pelvic endometriosis. Awareness of this rare condition with careful history taking and physical examination may help the clinician to diagnose this condition.

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