

Case Report

Encysted hydrocele of the canal of nuck in adult female - A Case Report

Anantharaman.D^{*1}, Rathipriya I², Jayashree Ashok Kumar², Guruprasad G A²

1.Department of Surgery, MVJMC & RH, Hoskote, Karnataka. India.

2.Department of Obstetrics and Gynecology, MVJMC & RH, Hoskote, Karnataka. India.

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Abstract

Hydrocele of the canal of Nuck is the female counter part of the more common hydrocoele seen in males due to the persistence of processes vaginalis. In females it usually presents in childhood and very rarely in adult females. Here we present a 19cm large encysted hydrocele in an adult female.

Key words: Female hydrocele, canal of nuck, encysted hydrocele, labial cyst

Introduction

Encysted Hydrocele of the canal of Nuck, the exact male counterpart of encysted hydrocele of the cord occurs very rarely in females due to persistence of the processes vaginalis. It commonly presents in childhood and very rarely in adults. Literature review revealed only few case reports of encysted hydrocele in adult females. We presented a case of encysted hydrocele of the canal of Nuck in a 25y old female measuring about 19cm.

Case History

A 25y old female presented with a swelling on the left labia majora since 5months, gradually increasing in size to reach a size of about 10x6cms. (Fig 1) There was no history of reducibility of the swelling, pain, vomiting, distension of abdomen and fever.

On examination, a cystic swelling of size 10x8cm on the left labia majora was present. The swelling was trans-illuminant. There was no cough impulse and the swelling could not be reduced. Skin over the swelling was lax and redundant. A differential diagnosis of labial cyst or hydrocele of canal of Nuck was entertained.

Ultrasound revealed a well-defined cyst with clear contents in left labia measuring 6.5x3.5x5cms with volume of 80-90 ml. Colour Doppler revealed avascular cystic structure. Fluid aspirated from the cyst showed few squamous cells, macrophages and no atypical cells.

At surgery through an inguino-labial incision the cyst was dissected, the neck of the sac terminated at the medial part of the inguinal canal (Fig 2). The sac was dissected free from the round ligament and excised (fig 3).The sac measured about 19 cm. Clear fluids was found on opening the sac. Histopathology revealed, flat mesothelium cells.

Discussion

Hydrocele of the canal of Nuck is a very rare clinical entity. It appears due to the persistence of the processes vaginalis, which is a protrusion of parietal peritoneum into the inguinal canal ⁽¹⁾. Normally the processes vaginalis gets obliterated at birth or within the first year of birth.

*Corresponding Author

Dr Anantharaman D, Department of Surgery, MVJMC & RH, Hoskote, Karnataka. India.

E mail : meetdrananth@yahoo.co.in





Fig:1 – Showing inguino-labial swelling.

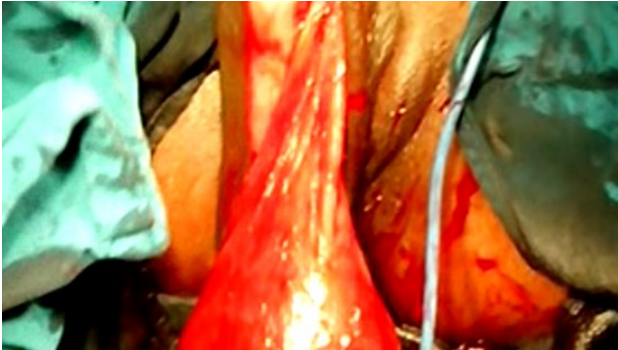


Fig:2 – Sac dissected up into the inguinal canal



Fig:3 – Sac dissected into the inguinal canal



Fig:4 – Illustrating the final outcome after excision.

Persistence of the processes can result in either a communicating or non-communicating (Encysted) hydrocele or congenital hernia^(1,2). This entity is more common in male children and rare in female children.^(1,3) Very rarely, it presents in adult females usually as a unilateral large trans-illuminant cystic swelling in the labia majora. Sonographically it appears as an oval anechoic cyst lined by a well-defined capsule, sometimes showing communication with the peritoneal cavity. Some cases need MR for diagnosis⁽⁴⁾. Differential diagnosis such as Bartholins cyst, inguinal hernias, cystic lymphangioma, arterial and venous aneurysms should be ruled out. Surgical excision is the treatment of choice^(5,6).

Conclusion

In the present case, the cyst was large interfering with her sexual activity because of which the patient had lost her morale. The encysted hydrocele was surgically excised and good cosmetic outcome ensured (fig 4). Post-operative follow up was uneventful.

References

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