

Case Report

Encysted hydrocele of the cord presenting as a groin swelling in an adult: a case report

Bibekananda Mahapatra, Anuradha Panchal, Abhishek Mahadik, Qurratulain Chougale*

Department of General Surgery, D Y Patil Medical College and Hospital, Navi Mumbai, Maharashtra, India

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***Correspondence:**

Dr. Qurratulain Chougale,

E-mail: qchougale@gmail.com

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ABSTRACT

The hydrocele of the cord presents as a translucent swelling in the inguinal canal or scrotum, separately above the testis. It is more commonly seen in childhood and is rare in adults. It comprises of two varieties based on their communication with the peritoneal cavity. The encysted hydrocele of the cord does not communicate with the peritoneal cavity above or the tunica vaginalis below. The other variety known as the funicular hydrocele communicates with the peritoneal cavity above but does not communicate with the tunica vaginalis below. This case report presents the case of a 22 year old young male with an inguinal swelling. Clinical differential diagnoses were of inguinal lymphadenitis, encysted hydrocele of the cord and irreducible hernia. The aim of this report is to highlight the role of ultrasonogram in early diagnosis and surgical excision as mainstay of treatment.

Keywords: Hydrocele, Encysted hydrocele of cord, Cord hydrocele

INTRODUCTION

Encysted hydrocele of the cord is caused by defect in the closure of the processus vaginalis, as the testicles migrate into the scrotum during foetal development. It is more commonly seen in childhood and rarely in adults.¹ There are two variations of a spermatic cord hydrocele - the encysted variety that does not communicate with the peritoneal cavity, and the funicular variety that communicates with the peritoneal cavity. The encysted type can be confused with an inguinal mass (lymphadenopathy, hernias), and also primary tumors of the cord.² This case report highlights the various differential diagnoses that can present as an inguinal swelling in an adult, the use of ultrasonogram as a modality for early diagnosis and, surgical exploration and excision remain the treatment of choice

CASE REPORT

A 22 year old male patient presented with a left groin swelling since 9 days to the outpatients department of our

hospital. Patient noticed that earlier the swelling was mobile from the groin to the scrotum but appeared to be non- mobile since 2 days. He did not give any history of trauma to the groin area, no history of lifting heavy weights, no fever, no vomiting or constipation. General physical examination and systemic examinations were normal. Abdominal examination was normal with good bowel sounds.

On local examination, a well circumscribed globular swelling measuring 4 x 3cm was seen in the mid inguinal canal, which was tense, cystic, mobile and non-tender on palpation. The swelling could be felt separate from the testis and traction test was positive. Both the testes were palpable in the scrotum and appeared to be clinically normal. Trans-illumination test was positive and cough impulse was negative. Ultrasonogram showed a well-defined encysted collection of size 1.5 x 2.2 x 2.6cm = 4.9cc in the left inguinal region along the left spermatic cord suggestive of encysted hydrocele. Routine investigations including complete hemogram and urine analysis were normal. Liver profile was within normal limits. Clinical differential diagnoses were of inguinal

lymphadenitis, encysted hydrocele of the cord and irreducible hernia. The patient was posted for an elective left inguinal exploration under spinal anesthesia. A left groin skin crease incision was taken. On opening the External oblique aponeurosis, a fluid filled sac was seen along the spermatic cord near the deep ring. The sac was separated from the flimsy adhesions and delivered out intact after ligating the base. Histopathology was consistent with that of hydrocele. Postoperative period was uneventful.

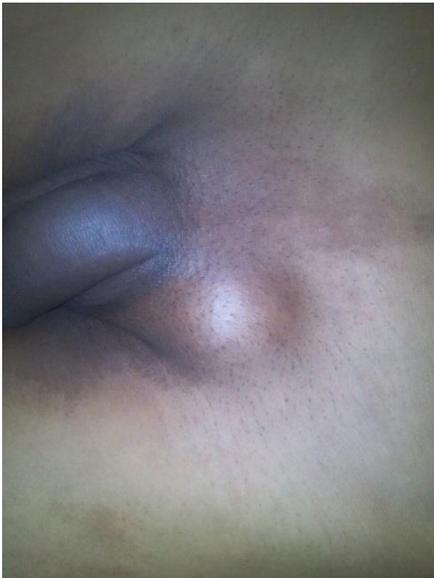


Figure 1: Pre-operative photograph of patient with left inguinal swelling.

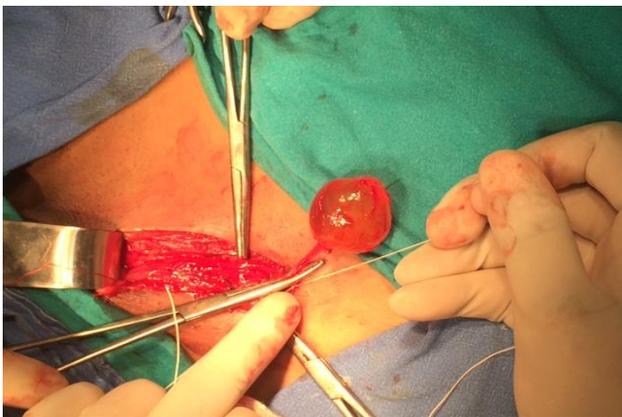


Figure 2: Intra operative photograph as the sac is delivered out intact.

DISCUSSION

Encysted hydrocele of the cord is uncommon in adults with majority of the presentation in childhood. The hydrocele of the spermatic cord typically presents as a translucent swelling in the inguinal canal or upper scrotum, located above the testis.¹ Embryologically, as the testis descends from its retroperitoneal position into the scrotum between 28 and 32 weeks of gestation, it

carries with it two layers of peritoneum, which are called the processus vaginalis. It closes proximally at the level of the internal ring, distally above the epididymis and the segment in between, undergoes involution.³ There are two variations of a spermatic cord hydrocele: the encysted variety that does not communicate with the peritoneal cavity, and the funicular variety that communicates with the peritoneal cavity. The encysted type can be confused with an inguinal mass (lymphadenopathy, hernias), and also primary tumors of the cord.²

Ultrasonogram can be used to easily differentiate between encysted hydrocele and funicular hydrocele if one looks closely at the internal inguinal ring. Encysted hydrocele manifests as a loculated collection above the testis with a closed internal inguinal ring. Funicular hydrocele appears as an anechoic collection separated from the testis inferiorly but communicates with peritoneal cavity at the internal inguinal ring.⁴ Clinically, it should be differentiated from incarcerated inguinal hernia, inguinal lymphadenopathy, undescended testis and spermatic cord lipoma, which will help in avoiding unnecessary invasive procedures.⁵ The diagnosis in the present case report was made easy as the patient was clinically stable at the time of presentation, and clinical and radiological examination also aided to an early diagnosis and intervention.

CONCLUSION

Encysted Hydrocele of the cord although rare can present in adulthood. This case report highlights the various differential diagnoses that can present as an inguinal swelling; the use of ultrasonogram as a modality for early diagnosis and, surgical exploration and excision remains the treatment of choice.

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