

**Case report:****Hydatid cyst in the scrotum: a case report  
and review of literature**

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Received: 11<sup>th</sup> Mar 2009; Accepted: 19<sup>th</sup> May 2010.**ABSTRACT**

A rare case of hydatid cyst in the scrotum in a man of 20 years old was recorded, the case was diagnosed as a hydrocele, but the histopathological examination proved to be a hydatid cyst.

Hydatid cyst of scrotum is very rare event<sup>(1)</sup>. This is the fourth reported case of hydatid disease in the scrotum in all medical literatures as far as the time of publishing this article. Hydatid cyst in the scrotum should be put in mind in any case of scrotal swelling especially in endemic areas<sup>(2)</sup>.

**Keywords:** Hydatid cyst, scrotal mass.

**الخلاصة**

سجلت حالة نادرة لمرض الأكياس المائية في كيس الصفن لشاب يبلغ من العمر ٢٠ عاماً كان يعاني من قيلة مائية يمنية وقد تم تشخيص الحالة بواسطة الفحص النسيجي للكيس بعد استئصاله كلياً وهذه هي الحالة الرابعة المسجلة عالمياً ضمن البحوث والوثائق الطبية والعلمية لحد نشر هذا المقال، حيث تعتبر الإصابة بالأكياس المائية في كيس الصفن من الحالات النادرة جداً. عليه يجب وضع تشخيص الأكياس المائية في الحسبان في حالة وجود قيلة مائية خصوصاً في المناطق الموبوءة بهذا المرض.

**A** twenty year old male from rural area presented with painless mass in his right scrotum of five months duration that increased in size gradually and bothered him when wearing tight pantaloons, otherwise the patient was in good health, and gave no history of previous disease or operation, neither allergic to medication. The examination revealed a healthy fit patient with normal vital signs. Chest, heart and abdominal examinations were normal. Local examination showed painless cystic mass of 7 centimeters in diameter, at right scrotum with positive fluctuation and translucency, it was not reducible, had negative cough impulses and doesn't disappear on lying down, it was easy to palpate the spermatic cord above the mass but difficult to palpate the right testicle, the left

side of scrotum was normal (figure one). Ultrasonic examination revealed cystic mass within the right scrotum with normal testes and epididymis. The diagnosis of right sided vaginal hydrocele was made and the patient prepared for operation. The preoperative hemoglobin, fasting blood sugar and blood urea were normal, chest x ray and ECG were normal as well. At exploration of right scrotum, a well defined whitish sac which possessed no neck and not related to testis or epididymis, it was easily separated from the scrotum and removed in toto (figures 2 and 3). Histopathological report of the cyst revealed typical sac of hydatid cyst. Retrospectively, an ultrasound of liver was done, which showed normal liver and intra-abdominal organs.



Figure (1): A cystic lesion in the right scrotum.



Figures (2, 3): The cyst removed in toto.

### Discussion

Hydatid cyst disease is endemic in middle east, India, Africa, south America, new Zealand, Australia, Turkey and Southern Europe<sup>(3-5)</sup>.

Infestation by hydatid cyst in human most commonly involve the liver (55-70%) followed by lung (18-35%), the two organs can be affected simultaneously in about (5-13%) of cases<sup>(6,7)</sup>. Hydatid cyst can occur in any part of the body and a high suspicion of this disease in any cystic lesion is justified in endemic region<sup>(2,8)</sup>. Other sites in decreasing order of frequency included the peritoneum, kidney, brain, mediastinum, heart, bone, soft tissue, spinal cord, spleen, pleura, adrenal gland, bladder, ovary, scrotum and thyroid gland<sup>(2)</sup>.

To our knowledge there have been only 4 reports of HD involving the scrotum<sup>(1,2,9)</sup>. In this case report there was no other organs involved with the scrotum, which make it a unique condition. The clinical picture of hydatid disease depends on the size and site of the lesion as well as on the accessibility of the organ involved for clinical examination, the deferential diagnosis of intra-scrotal mass includes tumor, epididymitis, epididymal cyst, epididymo-orchitis, testicular torsion, and less commonly, hernia, hydrocele, spermatocele, varicocele, hematoma and hematocele<sup>(11)</sup>, since the mass in this patient was cystic and painless, the diagnoses of hydrocele was made. The trans-scrotal ultrasound is rapid, sensitive, non invasive and inexpensive way to determine the intra-scrotal mass<sup>(10)</sup>. Total excision of scrotal HD is the treatment of choice specially if there is no adhesion<sup>(11)</sup>.

In conclusion, HD should kept in mind when a cystic lesion in encountered in the scrotum in endemic areas.

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