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# Hydatid Cyst of the Spermatic Cord Miming a Testicular Torsion

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### **Abstract**

Hydatid cyst of the spermatic cord is very rare. We report a case of hydatid cyst of the spermatic cord revealed by right acute testis miming a testicular torsion. The diagnosis was made per and postoperatively on the basis of the clinical appearance of the cyst and pathology. The cyst was completely removed without breaking it and the patient did not present with a recurrence during follow-up.

# **Subject Areas**

Urology

## **Keywords**

Hydatid Cyst, Spermatic Cord, Testicular Torsion, Histopathology, Surgery

# 1. Introduction and Objective

Hydatid disease is endemic in developing countries as Morocco [1]. It's usually located in the liver, lungs, spleen, and kidney [2].

It can affect any part of the body. even exceptional locations have been described such as the posterior mediastinum, the retroperitoneal space, adrenal gland, the brain, and the scrotum [3] [4].

Localization at the level of the sperm cord is exceptional with only a few cases reported in the literature [5].

The aim of this work is to report an unusual location of echinococcosis at the spermatic cord of a young male revealed by acute testis miming a testicular torsion.

#### 2. Observation

A 41-years-old male admitted to the emergency department in an acute right

testicular pain chart of less than four hours. The diagnosis of testicular torsion is suspected. Surgical exploration found a cyst strongly adherent to the spermatic cord, a total excision of the cyst was performed (Figure 1). The operative diagnosis was hydatid cyst because we identified the germinative membrane and liquor of a hydatid cyst after opening the cyst wall.

The pathologic examination found, Echinococcus granulosus protoscolex, confirmed the operative diagnosis of hydatid disease (Figure 2).

Chest radiography and liver ultrasonography showed no coexisting thoracic or intra-abdominal hydatid disease. The patient was discharged with antihelmintics to prevent any distant dissemination. Long-term follow-up of the patient is performed to prevent recurrence.

#### 3. Discussion

Human echinococcosis is a zoonotic parasitic disease caused by a cestode called Echinococcus granulosus, living in the digestive tract of dogs and other carnivorous canids.

This parasitic infection is endemic in many countries [6].

A number of authors have placed Morocco among the countries of high endemicity [7].

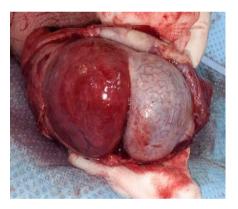


Figure 1. Normal testis and epididymis with a clean-walled mass at the expense of the spermatic cord.



Figure 2. Germinative membrane.

The average age to contract the disease based on series that have already dealt with the subject is 36 years old [8] [9].

The liver and lungs are the most affected organs by parasitosis.

The other intra-abdominal locations are less frequent (10% - 15%) [10].

The hydatid cyst of the spermatic cord is even rarer, even in an endemic country like Morocco.

This pathology can mimic several pathologies, it has clinical and radiological variability. As in our case, the suspected diagnosis was a torsion of the right testicle [11], it may give a clinical aspect of right hydrocele, or it may mimic a third testicle.

Ultrasound associated with the clinic can correct the diagnosis.

Concerning the therapeutic management, surgical treatment is the gold standard. Resection of the cyst, without rupture of the latter, allows its elimination, it's associated with postoperative anti-helmintic treatment [12].

Postoperative follow-up with an extension assessment to research secondary locations is necessary to detect recurrence.

#### 4. Conclusions

The hydatid cyst of the cord is a rare pathology, with some rare cases reported in the literature. It can have different clinical revelations, as in our case where it mimicked a torsion of the spermatic cord.

In countries like Morocco, echinococcosis is endemic, the hydatid cyst must be considered among the causes of cystic lesions of the spermatic cord even if it is rarely observed and the clinical manifestations are variable, in our case, the patient presented in the emergency room in a clinical picture of scrotal torsion when it was a hydatid cord cyst.

# **Conflicts of Interest**

The authors declare no conflicts of interest.

## References

- [1] Haouas, N., Sahraoui, W., Youssef, A., Thabet, I., Ben Sorba, N., Jaidane, M. and Mosbah, A.T. (2006) Hydatid Cyst of the Spermatic Cord. *Progrès en Urologie*, **16**, 499-501.
- [2] Holcomb III, G.W. and Andrews, W.S. (2006) Gallbladder Disease and Hepatic Infections. In: Grosfeld, J.L., O'Neill, J.A., Eds., *Pediatric Surgery*, Elsevier, Mosby, 1646.
- [3] Karnak, I., Ciftci, A.O. and Tanyel, F.C. (1998) Hydatid Cyst: An Unusual Etiology for a Cystic Lesion of the Posterior Mediastinum. *Journal of Pediatric Surgery*, 33, 759-760. <a href="https://doi.org/10.1016/S0022-3468(98)90211-1">https://doi.org/10.1016/S0022-3468(98)90211-1</a>
- [4] Di Cataldo, A., Trombatone, G., Greco, R., *et al.* (2003) Hydatid Disease in Very Unusual Location: The Adrenal Gland, a Case Report. *Chirurgia Italiana*, **55**, 275-278.
- [5] Turkyılmaz, Z., Sonmez, K., Karabulut, R., *et al.* (2006) Unusual Localization of Hydatid Cyst. *Acta Chirurgica Belgica*, **106**, 443-444.

- https://doi.org/10.1080/00015458.2006.11679928
- [6] Yurtçu, M., Gündüz, M., Toy, H. and Günel, E. (2007) Spermatic Cord Hydatid Cyst: An Unusual Localization. *Journal of Pediatric Surgery*, 42, e15-e16. https://doi.org/10.1016/j.jpedsurg.2007.08.008
- [7] Mahjour, J. (1996) Retrospective Survey on Hydatidosis in Morocco, Period 1980-1992. Epidemiological Bulletin, n°21.
- [8] Boudraa, Y., Laabidi, B. and Laaroussi, S. (2002) Surgical Cases of Hydatid Cysts at Ibn Sina University Hospital Center, Rabat-Salé, during 2001. Rabat, Morocco, Institut de Formation aux Carrières de Santé, 51p.
- [9] Amouian, S., Taiebi, I. and Mohamadian, R. (2006) A Retrospective Study of 1759 Cases of Hydatid Cyst in Mashhad Universty Hospitals. *Archives of Iranian Medicine*, 9, 187.
- [10] Nadeem, N., Khan, H., Fatimi, S. and Ahmad, M.N. (2006) Giant Multiple Intra-Abdominal Hydatid Cysts. *Journal of Ayub Medical College Abbottabad*, **18**, 70-72.
- [11] Hegele, A., Wappelhorst, D., Varga, Z., Brüning, F., Olbert, P., Frohme, C. and Hofmann, R. (2011) Predictors of Spermatic Cord Torsion—Clinical Presentation and Intraoperative Findings. *Open Journal of Urology*, **1**, 81-85. https://doi.org/10.4236/oju.2011.14017
- [12] Aksoy, Y., Ödev, K., Sahin, M., Arslan, A. and Koç, O. (2005) Percutaneous Treatment of Liver Hydatid Cysts: Comparison of Direct Injection of Albendazole and Hypertonic Saline Solution. *American Journal of Roentgenology*, 185, 727-734. https://doi.org/10.2214/ajr.185.3.01850727