

Tubular Ectasia of the Rete Testis: A Case Report

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Abstract

Case Report

Aims: To show the value of ultrasound in the diagnosis of tubular ectasia of the rete testis. **Case presentation:** We report the case of a 60 year old patient, without any notable history, in whom a cystic dilatation of the rete testis was revealed, following a scrotal trauma. **Discussion and conclusion:** Tubular ectasia of the rete testis is a pathologically benign process with a complex and varied etiology. It should be differentiated from neoplastic disease of the testis based on the patient's age, mode of presentation, tumor marker status, and characteristic findings on ultrasound and Doppler studies. Knowledge and diagnosis of this clinical entity may avoid unnecessary surgery in these patients.

Keywords: Cystic dilatation, cystic ectasia, rete testis, ultrasound.

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INTRODUCTION

Le rete testis est un réseau anastomosé de tubules délicats situé dans le hile du testicule (mediastinum testis) qui transporte les spermatozoïdes des tubules séminifères vers les vasa efferentia. L'ectasie du rete tubulaire est un trouble dans lequel on retrouve de nombreux kystes bénins. C'est une affection bénigne rare dont l'aspect échographique typique est celui de petites structures sacciformes anéchogènes au niveau de l'abouchement du testicule médiastin [1]. De découverte fortuite car généralement asymptomatique et en ce sens elle doit être distinguée d'une tumeur testiculaire ce qui constitue l'enjeu de ce diagnostic car si presque toutes les tumeurs testiculaires sont solides, certaines tels que les tératomes peuvent avoir un contingent kystique. [2].

CASE REPORT

We report the observation of a 60-year-old male patient, without any notable history, admitted for a trauma picture generating a scrotal pain. On physical examination, the right testicle was swollen and firmer than the left one without a clearly identifiable lesion on palpation. Serum tumor markers of testicular malignancy were not elevated, and a scrotal ultrasound revealed a left testicle of normal dimensions with multiple fluid-filled tubular structures (Fig. 1). Both epididymides and the right testis had a normal appearance. Doppler studies showed no evidence of

altered blood flow (Fig. 2). Overall, the appearance of the right testis was highly suggestive of intratesticular cysts with tubular ectasia of the rete testis. Conservative treatment was initiated and repeated scrotal ultrasound scans at 1, 3 and 6 months follow-up characterized the stable appearance of the visualized structures. Serum tumor markers also did not change and remained negative.

DISCUSSION

Intratesticular cysts may originate from the rete testis. The seminiferous tubules terminate at the apex of the lobules by fusing and then flow into the tubuli recti. The latter enter the testicular mediastinum forming anastomosing spaces called rete testis. They will later form the efferent ducts and then the epididymis.

Dilatations in the rete testis are visualized on ultrasound as cystic saccular formations without visualization of a solid fleshy component at this level: this aspect is pathognomonic of cystic ectasia of the rete testis [4].

The main differential diagnoses of cystic ectasia of the rete testis are cystic dysplasia and intratesticular varicocele. The former appears as a malformation of the renal or urogenital excretory ducts [5] and the diagnosis of the latter is the prerogative of echodoppler.

Cystic ectasia of the rete testis may be associated with urological conditions such as epididymitis, spermatocele, or epididymitis obstruction.

However, in our case, scrotal trauma was reported by the patient. The median age of patients with cystic ectasia of the rete testis has been reported to be 62 years [6].

The diagnosis can be made on a set of clinical and ultrasonographic arguments that allow the patient to undergo surgical treatment when the preoperative diagnosis has been made [7].

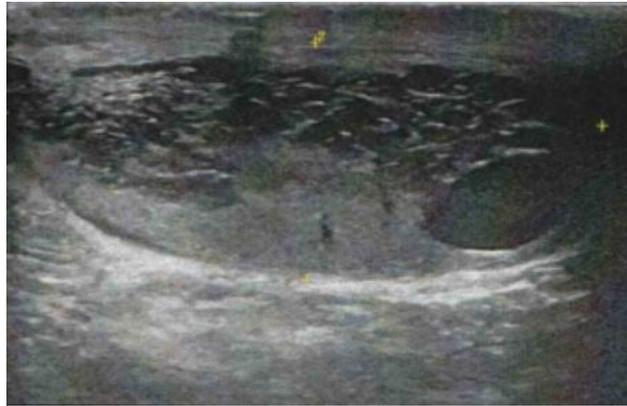


Fig-1: Longitudinal view of the right hemiscrotum demonstrating a dilated rete testis and multiple, low-reflective cystic tubules



Fig-2: Axial view of the right hemiscrotum demonstrating cystic changes with absent blood flow within the mediastinum testis on Doppler study

CONCLUSION

Tubular ectasia of the rete testis is a benign pathology whose etiopathogeny is complex and varied. Its knowledge allows making the part with a tumoral origin thus avoiding an abusive surgical intervention. In this sense, ultrasound imaging coupled with Doppler associated with the dosage of tumor markers as well as with the history of the patient can evoke the diagnosis.

CONSENT

All authors declare that 'written informed consent was obtained from the patient (or other approved parties) for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

ETHICAL APPROVAL

"All authors hereby declare that all experiments have been examined and approved by the appropriate ethics committee and have therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki."

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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