

A Case of Cystic Ectasia of the Rete Testis

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= Abstract =

The seminiferous tubules merge and connect with the tubuli recti that form the spaces known as the rete testis. Cystic ectasia of the rete testis is a rare benign testicular lesion. We report the cystic ectasia of the rete testis in a 66-year-old man.

Key Words: Ectasia, Rete testis, Testis

Cystic ectasia of the rete testis is a benign condition.^{1,2} The diagnosis can be made with clinical and sonographic features. Although a total of 80 cases of cystic ectasia of the rete testis has been reported, they may be less thorough due to the lack of the concurrent sonographic findings and histological confirmation.¹⁻⁷ We report the sonographic features of cystic ectasia of the rete testis proven with histopathology in a 66-year-old man.

Case Report

A 66-year-old man visited our hospital due to a palpable left testicular mass for 8 months. His medical history was unremarkable with no history of herniorrhaphy, vasectomy, epididymitis or trauma. His physical examination was also unremarkable except palpable mass on the left testis. Testicular ultrasound showed clustered anechoic tubular structures in the rete testis of left testicle (Fig. 1). Serum testicular tu-

mor markers (α -fetoprotein, β -human chorionic gonadotropin and lactate dehydrogenase) were all within normal limits. The patient wanted to distinguish the intratesticular cystic lesion from a malignancy, therefore, a left radical orchiectomy was performed. The cut surface showed multilocular cysts, lined by simple cuboidal to columnar epithelial cells. They were located mainly in the area of the rete testis and consistent with a cystic ectasia of the rete testis (Fig. 1).

Discussion

Intratesticular cysts could originate from the rete testis.⁸ The seminiferous tubules merge at the apex of each lobule of the testis and connect with the tubuli recti. The tubuli recti enter the mediastinum testis forming irregular anastomosing spaces known as the rete testis. They continue distally to become the efferent ducts and the epididymis. Ectatic changes in the rete testis can be detectable sonographically. Cystic spaces without a solid component in the region of the rete testis is pathognomonic for cystic ectasia of the rete testis.¹

Cystic ectasia of the rete testis can be differentiated from other benign intratesticular lesions, notably cystic dysplasia and intratesticular varicocele. Intratesticular

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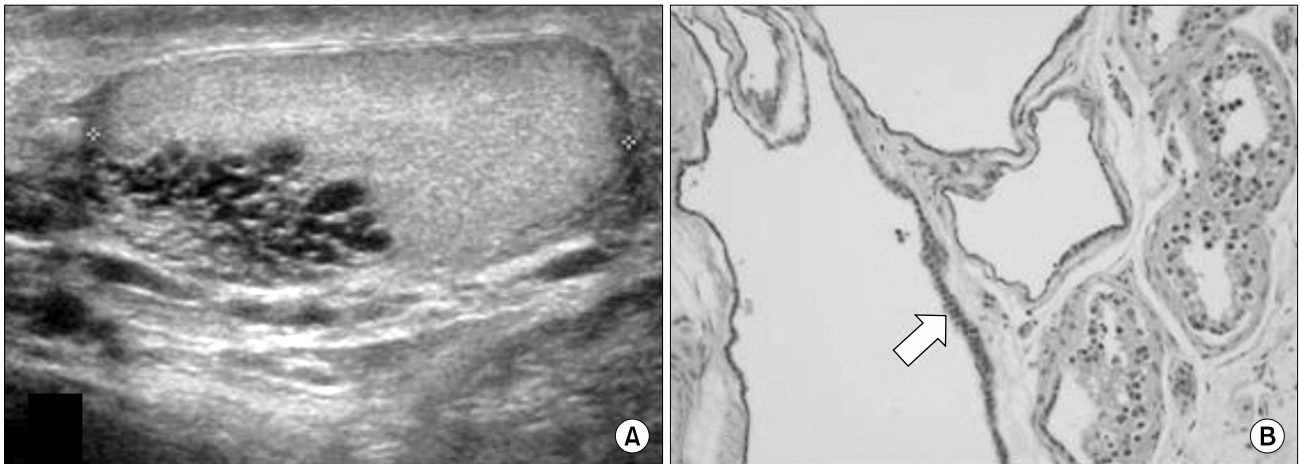


Fig. 1. (A) Ultrasound of the testis showed clustered anechoic tubular structures within the rete testis of left testicle ($1.63 \times 1.19 \times 2.20$ cm). (B) Microscopic examination in the rete testis region showed multilocular cysts, lined by simple cuboidal to columnar epithelial cells and consistent with a cystic ectasia of the rete testis and consistent with a cystic ectasia of the rete testis (arrow). H&E, $\times 200$.

varicocele can be differentiated by color Doppler ultrasound.⁵ Cystic dysplasia is a congenital lesion and associated with renal or urogenital excretory duct malformations.^{5,6}

Cystic ectasia of the rete testis may be related to urological conditions that are associated with epididymal obstruction, such as vasectomy, spermatocele or epididymitis.^{1,2,6,8} However, in this case, the patient's medical history was unremarkable with no history of herniorrhaphy, vasectomy, epididymitis or trauma.

The median age of patients with cystic ectasia of the rete testis was reported at 62 years.⁸ The diagnosis can be made with clinical and sonographic features. Surgical treatment was avoided when the preoperative diagnosis was done. In this case, the patient was 66-year-old, which was outside of the expected age range for testicular germ cell tumor. In addition, the tumor markers were all within normal limits. Although a observation was suggested as the treatment, the patient wanted to distinguish the intratesticular cystic lesion from a malignancy, hence the left radical orchiectomy was done. Histologically, there are 2 types of cystic ectasia, namely with and without epithelial metaplasia.³ In this case, epithelial metaplasia was not found.

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