A 16-year-old male presented with a painless right testicular mass, known for the past 2 years and that had recently increased in size. Physical examination confirmed a hard testicular mass and no evidence of lymphadenopathy or of gynecomastia. Laboratory results, including tumor markers, were normal.

Ultrasound (US) revealed a solid mass in the upper pole of the right testis that was well circumscribed, avascular, and displayed the onionskin appearance suggestive of testicular epidermoid cyst (1,2) (Figure-1).

Magnetic resonance (MR) confirmed the well-circumscribed intra-testicular mass with a
central area hyperintense on T1 and hypointense on T2 and a peripheral area isointense on T1 and hyperintense on T2, displaying the target or bull’s eye appearance, typical of testicular epidermoid cyst (1,2) (Figure-2). The remaining testicular parenchyma was unremarkable.

Surgical enucleation of the right testicular mass was performed (3). The pathological analysis of the surgical specimen confirmed the clinical and radiological proposed diagnosis (1,2,4) (Figure-3). The postoperative follow-up was uneventful.

The case presented demonstrates the clinical, ultrasound, and MR findings diagnostic of testicular epidermoid cyst with macroscopy correlation. The recognition of the typical imaging findings of testicular epidermoid cyst can suggest the pre-operative diagnosis of this rare benign tumor thus allowing to considered organ-preserving surgery and its associated psychological and cosmetic benefits.

Figure 2 - a. Axial T2-weighted image confirms the well-circumscribed mass in the upper medial pole of the right testis. The mass has a central slightly hyperintense center and an isointense periphery. b. Sagittal T2-weighted image confirms the well-circumscribed mass in the upper medial pole of the right testis. The mass had a central slightly hypointense center and a hyperintense periphery.

Figure 3 - Photograph of the sectioned surgical specimen shows a bilobulated mass with a fibrous capsule that was composed of a laminated white-yellow paste like material, typical of keratin.

REFERENCES


Correspondence address:
Dr. Lígia Pires-Gonçalves
Department of Imagiology, Hospital de Braga
Largo Carlos Amarante, 2242
Braga, 4701-965, Portugal
Fax: + 351 253 613-334
E-mail: l.f.p.goncalves@gmail.com
UROLOGICAL SURVEY

Athanase Billis  
State University of Campinas  
Campinas, SP, Brazil

Ricardo Miyaoka  
State University of Campinas  
Campinas, SP, Brazil

Andreas Böhle  
Helios Agnes Karll Hospital  
Bad Schwartau, Germany

Manoj Monga  
University of Minnesota  
Edina, MN, USA

Sean P. Elliott  
University of Minnesota  
Minneapolis, MN, USA

Adilson Prando  
Vera Cruz Hospital  
Campinas, SP, Brazil

Fernando J. Kim  
Univ Colorado Health Sci Ctr  
Denver, Colorado, USA

Leonardo O. Reis  
State University of Campinas  
Campinas, SP, Brazil

M. Chad Wallis  
University of Utah  
Salt Lake City, Utah, USA