

## TESTIS SPARING SURGERY FOR EPIDERMOID CYST OF TESTIS IN AN INFERTILE MAN

Testis epidermoid kisti bulunan infertil bir olguda testis koruyucu cerrahi

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**Abstract:** In this case report, testis sparing surgery, performed for a heterogenous testicular mass in a 25 year-old man was presented. The patient was infertile for five years. Preoperative ultrasound findings allowed us to such surgery. Intraoperative frozen sectioning showed the benign nature of the lesion, consistent with the final histologic examination. For aesthetic, cosmetic, psychologic and fertility preserving benefits, treatment selection of testis sparing surgery in some testicular masses should be carried out according to clinical, radiological and frozen section findings.

**Key Words:** Epidermoid, cyst; Testicular, neoplasms; Testis

**Özet:** Bu olgu sunumunda, preoperatif ultrasonografide heterojen yapıda testis kitlesi nedeniyle opere edilen ve intraoperatif frozen incelemede malignite yönünde bir bulgu saptanamayan, yirmibeş yaşında, beş yıldır infertil olan bir hastada testis koruyucu cerrahi rapor edilmiştir. Sonuç olarak, kozmetik ve psikolojik faydalarının yanında, fertilitiyi de korumak amacı ile bazı intratestiküler kitlelerin cerrahi tedavisinde klinik ve radyolojik özellikler ve frozen inceleme sonuçları göz önünde bulundurularak testis koruyucu cerrahi tercih edilmelidir.

**Anahtar Kelimeler:** Epidermoid, kist; Testis; Testis, tümörleri

Epidermoid cyst is a rare, benign tumour of the testis with no malignant potential and accounts for less than 1% of all testicular neoplasms (1,2). Suggestion that the intratesticular mass is an epidermoid cyst, which is frequently made with ultrasonography, and enucleation of the mass with organ sparing is warranted (1). We present herein an epidermoid cyst of testis in an infertile patient.

### CASE REPORT

A twenty-five year old male noted a painless swelling in his right testis and applied to our Urology Department. There was no history of

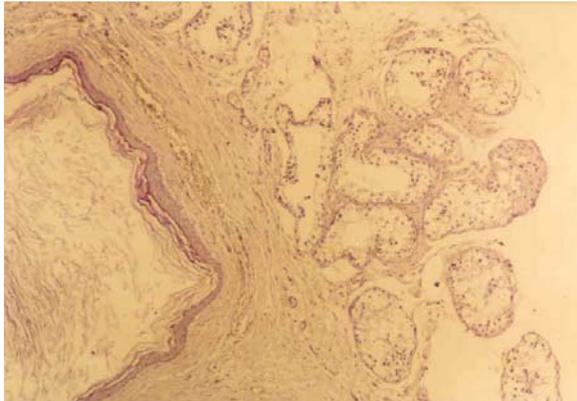
trauma and another illness. Physical examination revealed a hard, nontender mass in the testis. Serum  $\alpha$ -fetoprotein and  $\beta$ -human chorionic gonadotropin levels were normal. Ultrasonography showed an intratesticular mass in the lower pole of the right testis. The mass consisted of solid and cystic elements, amorphous calcifications and internal echoes with a heterogenous pattern of appearance. Colour doppler ultrasonography revealed hypovascularity and very low flow pattern within the mass.

Not having excluded the possibility of malignancy, we intended to perform an exploration of the mass. Through inguinal approach, the spermatic cord was isolated and occluded with a noncrushing clamp. After incision of the tunica albuginea a cystic mass with well preserved demarcation was encountered. It was enucleated, preserving the surrounding testicular tissue. Frozen section examination was negative for malignancy. The spermatic cord was then released and closure of the tunica albuginea

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and testicular placement into the scrotum was performed. Final histologic examination showed the diagnosis of epidermoid cyst (Fig. 1). The postoperative follow-up period of six months was uneventful.



**Figure 1.** Histologic slide of epidermoid cyst showing squamous epithelium surrounding laminated keratin layers, adjacent to normal seminiferous tubules (Hematoxylin and eosin stain, original magnification x40).

## **DISCUSSION**

Epidermoid cyst of the testis usually presents as a painless nodule detected by the patient or during routine physical examination. It may occur in all

ages, mostly between the second and fourth decades with a preponderance to the right testis (1-3). There is controversy regarding the histogenesis but they are generally considered as examples of monophasic development of teratomas (1,3).

Ultrasonographic appearance of the disease has been reported in a great variety of forms. Some have reported it to be purely cystic, others have described it as a cystic lesion filled with keratin and amorphous material. Echogenicity of the lesion ranges from hypoechoic to hyperechoic pattern. Specific appearances as “target” and “onion ring” have also been described (3-6). Ultrasonographic appearance may suggest the possibility of disease although this may not convince the clinician to exclude a malignancy. For psychologic and cosmetic benefits and for preservation of fertility, organ confining surgery should be favored by the surgeon with frozen sectioning (2,4). We treated our patient accordingly. Possible diagnosis of epidermoid cyst in ultrasonography and infertility of the patient for five years led us to such surgery.

In conclusion, although ultrasonography may strongly suggest the diagnosis of epidermoid cyst and frozen section may indicate a benign lesion, final histopathologic examination is the most crucial part of diagnosis. The supportive findings of an epidermoid cyst may lead the surgeon to spare testis rather than orchiectomy, which is the current opinion in the literature (1-4,7).

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