Intratesticular Varicocele

İntratestiküler Varikosel

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Özet

İntratestiküler varikosel skrotal ultrasonografide, semptomatik erkeklerin% 2'sinden daha az görülen nadir bir durumdur. Burada, skrotal ağrı ile başvuran ve skrotal renkli Doppler ultrasonografide ekstra testiküler varikosel ile ilişkili tek taraflı intratestiküler varikosel tanısı konan 28 yaşındaki olgu sunulmuştur. İntratestiküler varikoselin değişken bir ultrasonografik görünümü vardır. Renkli doppler ultrason, varikoselin tanı ve tedavisinde önemlidir.

Anahtar Kelimeler

İntratestiküler Varikosel; Renkli Doppler Ultrasonografi; Skrotum

Abstract

Intratesticular varicocele is a rare condition seen in less than 2% of the symptomatic men, undergoing testicular sonography. We report a case of 28-years-old patient who presented with scrotal pain and diagnosed as unilateral intratesticular varicocele with scrotal color Doppler ultrasonography. It was associated with extratesticular varicocele. Intratesticular varicocele has a variable sonographic appearence. Color Doppler sonography is important in confirming the diagnosis and the management of varicocele.

Keywords

Intratesticular Varicocele; Color Doppler Sonography; Scrotum

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Introduction

Intratesticular varicocele (ITV) is an unusual benign entity corresponding to an enlargement of intratesticular veins. It is usually associated with extra testicular varicocele (ETV) [1]. Here, we reported the clinical and color Doppler ultrasonography (CDUS) findings of a young man diagnosed with ITV.

Case Report

A 28 year-old patient presented to our department with acute left scrotal pain. Further anamnesis revealed no abnormalities. On physical examination pain and mass was detected on palpation at left testis. The right hemiscrotum and testis was normal on exam. Complete blood count, biochemical parameters and spermiogram tests were normal.

Gray scale ultrasonography (US) and CDUS was performed with Philips HD 11-XE using a 12 Mhz linear probe. US and CDUS showed normal echogenicity and size of bilateral testis and epididiymis. Amount of paratesticular liquids was physiological level. Vascular flow of bilateral testis and epididymis were normal. Gray scale US of the left testis demonstrated anechoic round and tubular structures at subcapsular location. CDUS image showed presence of a venous flow pattern with an increase in amplitude with Valsalva's maneuver. The findings were consistent with a diagnosis of ITV. The diameter of ITV was 2,1 mm and, a mild increasing in diameter and reversed flow was observed during the Valsalva's maneuver. The diameter of left pampiniformis plexus was also increased (3,3 mm). CDUS analysis showed increasing in diameter (4,1 mm) and a reversed flow response to Valsalva's maneuver (Figure 1 A,B,C).



Figure 1. Longitudinal gray scale sonogram of the left testis demonstrates anechoic cystic and tubular structures within the testis (A). Color Doppler image shows presence of coloration in round and tubular structures with Valsalva maneuver (B). Duplex sonography showed the presence of venous flow pattern with Valsalva maneuver, within intratesticular varicoceles. Note the associating extra testicular varicoceles (C).

Discussion

ITV is a rare condition which is described dilated intratesticular veins radiating from the mediastinum testis into the testicular parenchyma. It is seen in less than 2% of the symptomatic men, undergoing testicular sonography. It has reported fewer than 50% of cases that associated with an ipsilateral ETV [1]. It may occurs in the right, left or both testes and may be in the subcapsular or mediastinal location [2].

Testicular pain in the ITV is attributed to the stretching of the tunica albuginea after venous congestion [1]. It has been reported that ITV may lead to infertility like ETV. Particularly, semen analysis of the cases with bilateral and extratesticular support this concept [1,3].

Weiss et al reported the first 2 cases of ITV with CDUS, describing straight or serpentine

hypoechoic structures within the mediastinum testis radiating into the testicular parenchyma, identified as dilated intratesticular veins [2]. The classical sonographic appearence of ITV is tubular or round intratesticular hypoechoic lesions. However, round or oval ITVs may mimic focal testicular lesions, including cystic neoplasms [4]. The use of CDUS and Valsalva maneuver shows complete filling of the lesion with no evidence of an associated soft tissue mass. Therefore, CDUS is diagnostic and specific to differentiate ITV from other intratesticular disease [5,6].

In conclusion, ITV is a rare entity. It is usually associated with ETV but can occur as an isolated disease. Diagnosis of ITV in an adolescents or adult males with infertility, may be especially a reason for the treatment. CDUS is a simple and effective method in diagnosis of ITV. It is emphasized that all testicular cystic masses should be examined with CDUS which has an important role differentiating from focal intratesticular cysts with showing intraluminal flow [4,5].

Competing interests

The authors declare that they have no competing interests.

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