

# A Rare Cause of Sexual Dysfunction: Bilateral Giant Hydrocele: Case Report

## Seksüel Disfonksiyonun Nadir Bir Nedeni: Bilateral Dev Hidrosel

Kenan İSEN, MD,<sup>a</sup>  
Vedat UTKU, MD<sup>a</sup>

<sup>a</sup>Urology Clinic,  
Diyarbakır Education and  
Research Hospital, Diyarbakır

Geliş Tarihi/Received: 28.04.2008  
Kabul Tarihi/Accepted: 13.06.2008

Yazışma Adresi/Correspondence:  
Kenan İSEN, MD  
Diyarbakır Education and  
Research Hospital, Urology Clinic,  
Diyarbakır,  
TÜRKİYE/TURKEY  
kenanisen@hotmail.com

**ABSTRACT** Sexual dysfunction due to mechanical effect of a hydrocele is an unusual entity. A 58-year-old man was referred due to the presence of bilateral huge scrotal swelling along with sexual dysfunction. Sexual intercourse could not be achieved because of dragging effect on the phallus by the mass. Physical examination, scrotal ultrasonography and computed tomography revealed bilateral giant hydroceles. Bilateral hydrocelectomy was performed, and sexual dysfunction improved one week after the operation. The fluid content of bilateral giant hydrocele was in total 4000 mL. Most causes of sexual dysfunction cannot be cured with current treatment options. However, sexual dysfunction due to mechanical effect of bilateral giant hydroceles may easily be relieved with a minor surgical procedure.

**Key Words:** Testicular hydrocele; sexual dysfunction

**ÖZET** Hidroselin mekanik etkisi nedeniyle seksüel disfonksiyon gelişmesi nadir bir durumdur. 58 yaşında bir erkek hasta seksüel disfonksiyona neden olan iki taraflı dev skrotal kitle ile kliniğimize başvurdu. Kitleye destek yapılmadan hasta yürüyemiyordu. En son bir yıl önce eşi ile cinsel ilişkiye girmişti. Dev kitlenin penisi çekmesi sonucu cinsel ilişki sağlanamıyordu. Fizik muayene, skrotal ultrasonografi ve bilgisayarlı tomografi ile dev hidrosel tanısı kondu. Hastaya bilateral hidroselektomi uygulandı ve seksüel disfonksiyon operasyondan bir hafta sonra düzeldi. Bilateral dev hidroseldeki toplam sıvı miktarı 4000 mL idi. Seksüel disfonksiyonun nedenlerinden çoğuna günümüz tedavi yaklaşımları ile tam kür sağlanamamaktadır. Bununla birlikte, bilateral dev hidroselin kitle etkisi nedeniyle oluşan seksüel disfonksiyon küçük bir cerrahi işlem ile düzelebilir.

**Anahtar Kelimeler:** Testiküler hidrosel; seksüel disfonksiyon

Türkiye Klinikleri J Med Sci 2009;29(6):1767-9

Hydroceles usually do not affect the function of the testicle or change the hormonal function. Therefore, they should not have any effect on the sexual function. However, giant hydrocele is defined as a hydrocele having more than 1.000 mL of contents and the sexual function may be impaired, not only as a result of the dragging effect on the phallus by the mass, but also due to the psychosocial issues.<sup>1,2</sup> Bilateral giant hydroceles are rarely seen in adults. In this report, a case with bilateral giant hydroceles is presented owing to its rarity and its effect on the sexual function.

## CASE REPORT

A 58-year-old man was referred to us due to the presence of bilateral huge scrotal swellings and sexual dysfunction. The patient could not walk if somebody did not help him to carry the mass. He was married with seven children, and his last coital contact was about one year ago. Sexual intercourse could not be achieved due to the dragging effect of the mass on the phallus. The scrotal swelling developed gradually over the previous two years. There was no history of fever or trauma. Physical examination of the external genitalia revealed a buried phallus and bilateral scrotal swellings hanging down to the knee level (Figure 1). Testicles could not be palpated. The mass could be transilluminated. Complete blood count, serum glucose, liver function tests, BUN and creatinine levels were within the normal limits. Serum testosterone (T), follicle-stimulating hormone (FSH), luteinizing hormone (LH) and testicular tumor markers were



**FIGURE 1:** Dragging effect of the bilateral giant hydroceles on the phallus.

also in normal limits. Ultrasound showed bilateral giant scrotal cystic lesions. Computed tomography (CT) also revealed bilateral giant scrotal cystic lesions without any solid components. Bilateral hydrocelectomy was performed under the spinal anaesthesia. The fluid content of the mass was serous in nature and its volume was 2100 mL in the left side and 1900 mL in the right side. The patient was discharged on the second post-operative day. The patient was examined in the post-operative first week and the third month. Sexual dysfunction was improved, and the patient could have regular coitus one week after the operation. Data regarding the sexual function was obtained from the patient and his wife. Scrotal ultrasound showed no abnormal findings in the third postoperative month. Scrotal skin contraction occurred in the third post-operative month.

## DISCUSSION

There are a few reports on bilateral giant hydroceles in an adult; and none of them focused on its impact on the sexual function.<sup>1,3,4</sup> This is probably due to rarity of this condition. Akpo et al reported that giant hydroceles might reduce the patient's work capacity, impair sexual function and have a negative effect on the quality of life and cause infertility.<sup>1</sup> In addition, Gyapong et al reported that sexual function might also be impaired due to psychosocial stigma in patients with hydrocele.<sup>2</sup> In our case, the fluid content of bilateral giant hydroceles was 4000 mL in total, and erection could not be achieved due to the dragging effect of the mass on the phallus.

Management of giant hydroceles is controversial. Hydrocelectomy with or without excision of surplus scrotal skin is recommended. Excision of surplus scrotal skin may provide good cosmetic and functional results; however, it may be unnecessary since the scrotal skin contracts after hydrocelectomy.<sup>5</sup> In the present case, hydrocelectomy was performed. The patient had regular coitus one week after the operation, and scrotal skin contraction occurred within 3 months. We suppose that hydrocelectomy may

be sufficient to correct the sexual dysfunction associated with bilateral giant hydroceles, and patient satisfaction may be obtained.<sup>6</sup>

Sexual dysfunction can be treated successfully with current treatment options, however cannot be completely cured.<sup>7</sup> The only exceptions to this rule are psychogenic erectile dysfunction, post-traumatic arteriogenic erectile dysfunction in young patients and hormonal causes (e.g. hypogonadism, hyperprolactinaemia) which can be potentially cu-

red with specific treatment modalities.<sup>3,4</sup> It seems that bilateral giant hydrocele may be another curable cause of sexual dysfunction and can be treated with a minor surgical operation.

In conclusion, bilateral giant hydroceles are extremely rare in adulthood, and may lead to sexual dysfunction due to mechanical effect of the mass on the phallus. However, sexual dysfunction due to bilateral giant hydroceles may easily be improved with a minor surgical procedure.

## REFERENCES

1. Akpo EE. Giant hydrocele--an epitome of neglect. *Afr Health Sci* 2005;5(4):343-4.
2. Gyapong M, Gyapong J, Weiss M, Tanner M. The burden of hydrocele on men in Northern Ghana. *Acta Trop* 2000;77(3):287-94.
3. Numa H, Sakamoto S, Itoh H, Kusuyama H, Hiraga S, Okada K. [A case of giant obsolete hydrocele testis] [Article in Japanese] *Hinyokika Kiyo* 1987;33(9):1500-2.
4. Sugimoto K, Kaneko M, Matsumoto S, Hara Y, Kurita T. Giant bilateral hydrocele of testis with dysuria. *Japanese J Urol Surg* 2004; 17(10):1143-6.
5. Meabed A, Koko AH, Onuora VC, al-Mohalhal S, Youssef AM. Abdominoscrotal hydrocele. *Br J Urol* 1992;69(5):547-8.
6. Parmet S, Lynn C, Glass RM. Male sexual dysfunction. *JAMA* 2004;291(24):3076.
7. Wespes E, Amar E, Hatzichristou D, Hatzimouratidis K, Montorsi F, Pryor J, Vardi Y; EAU. EAU Guidelines on erectile dysfunction: an update. *Eur Urol* 2006;49(5):806-15.