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## A Giant Calculus Within A Congenital Urethral Diverticulum Presenting With İmpotence

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We report a 28-year-old man with a giant calculus in his urethral diverticulum whose main complaint was impotence. Interestingly, he described improvement in his erectile function after the removal of the diverticulum and calculus.

Key words: Congonital urethral diverticulum, urinary calculus, impotence.

✔ Asıl yakınması impotans olan ve üretral divertikülü içinde dev taş saptanan 28 yaşında bir erkek olgu sunuldu. Divertikül ve taşın çıkarılmasınan sonra erektil fonksiyonunda düzelme tanımlaması ilginç bulundu.

Anahtar Kelimeler: Konjenital üretral divertikül, üriner taş, impotans.

**U** rethral diverticulum in the male is very rare. It may be either congenital or acquired<sup>(1-5)</sup>. Stone formation in a urethral diverticulum may be seen especially in ones with a narrow orifice<sup>(6-8)</sup>. Usual complaints of these patients are about voiding<sup>(1-8)</sup>. Here we report a case who referred us with impotence.

Case report: A 28-years old male referred to us with his wife because of inability to have sexual intercourse for the last two years, since they got married. He told he did not have any sexual experience and he did not experienced even a rigid erection before the wedding either. There was no history of genital travma, surgery, infection or voiding difficulty. On physical examination, there was a hard mass, 3 cm in diameter, at the peno-scrotal junction. The remainder of genital and systemic examinations were normal.

A plain film of the pelvis and a retrograde urethrography revealed a calculus located in a urethral diverticulum (Figure 1 and Figure 2). All of the laboratory findings, including testosterone and prolacin, were normal. Cystoscopy confirmed the presence of a calculus via a 6 mm diverticular opening at ventral side of the penile urethra. The diverticulum was excised and removed together with the calculus. Urethral closure was performed over an 18 Fr Foley catheter. Recovery was uneventful. The urethral catheter was removed at postoperative 15<sup>th</sup> day and the patient voided normally. At his first control performed 2 weeks after he was discharged from the hospital the defined rigid erections and he told that he succeeded the coitus.

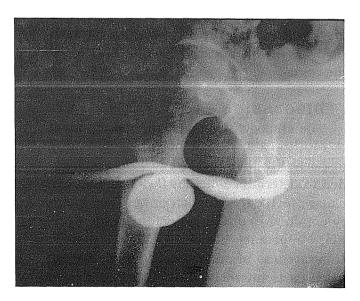
## DISCUSSION

The etiology, diagnosis and management of urethral diverticula have been properly discussed in the literature<sup>(1-8)</sup>. Here we needed to determine whether this situation can cause erectile dysfunction or not. The history obtained from the patient suggests a primary impotence because of its duration<sup>(9)</sup>. Unawareness of our patient of such a large calculus is interesting and this might have been as a result of his low socioeconomic situation. Thus, erectile dyfunction in psycogenic origin was considered in our case. For this reason, we planned to treat apparent

organic pathology at first, then to investigate the erectile disorder. However, the rapid improvement in erectile function lead us to think whether such a calculus can cause erectile dysfunction or not.



Figure :1. Appearence of the calculus on plain film.



**Figure :2.** Retrograde urethrogram demonstrating the urethral diverticulum.

It's very difficult to make a comment because of the lack of the tests required for the classification of the erectile dysfunction in our patient. Neither a calculus, nor urethral diverticula have been never mentioned previously in the etiology of erectile disorders<sup>(10)</sup>. Theoretically, it is not impossible that this situation diminishes erectile function. Because, such a calculus enveloped within the Buck's fascia together with the cavernous bodies may prevent the strectching of elastic fibers of the tunica that is required for the maintenance of rigidity.

In conclusion; this case is one of the best examples stressing the importance of proper physical examination, so that, further unnecessary invasive tests could be avoided. Despite the latest developmets, there are still some cases in whom the exact pathophysiology of erectile dyfunction cannot be fully understood.

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