Female Urethral Diverticula: 10 Years' Experience

Introduction and Objective: Female Urethral Diverticula are rare entities often associated with a wide range of nonspecific clinical symptoms and often are not detectable at physical examination. Still under-diagnosed, they are nowadays best demonstrated by novel imaging technologies as magnetic resonance. Complications of urethral diverticulum include recurrent infection, urinary incontinence, calculus formation, and development of intra-diverticular neoplasms. The aim of our study is to report our personal experience with the diagnosis, and treatment of this pathology.
Materials and Methods: The study was a retrospective cohort analysis. From June 2000 to December 2010, 22 women between the age of 25 and 80 years, underwent to surgical procedure for urethral diverticula. We assessed patients 'history, pre-operatory clinical symptoms and pelvic examination. We reviewed imaging data, surgical outcomes and complications.
Results: Nine women of 22 reported a history of recurrent urinary tract infections. Ten manifested urinary incontinence, caused by genuine stress incontinence or by postvoid dribbling (drainage of the diverticulum). Six pts (27%) showed contemporaneously three symptoms: disuria, dispareunia and dribbling. A detailed case history record and a careful vaginal examination are fundamental. A translabial or transvaginal ultrasound evaluation has been performed in all patients and it has been able to demonstrate the presence of the diverticulum in 15 cases, whereas magnetic resonance (MR) imaging had been diagnostic in all cases (9pt). Fifteen were simple diverticula, 7 were complex. No case of calculi or intra-diverticular neoplasms.The diverticolectomy had been performed by the same surgeon by transvaginal approach. After surgery, a urethral Foley catheter remains in place for bladder drainage for 24 hours. Two cases of complex diverticula needed a second surgical procedure for incomplete resection of multiple urethral diverticula. No cases of urinary incontinence or urethrovaginal fistula were recorded.
Conclusion: Clinicians should consider the possibility of a urethral diverticulum in women with chronic or recurrent lower urinary tract symptoms. After a careful vaginal examination, the selection of the appropriate imaging modality is critical in establishing the diagnosis. Modern imaging techniques, including US, MR imaging offer a noninvasive method of evaluating the female urethra that requires no patient preparation. High-resolution multiplanar MRI permits visualization of detailed urethral anatomy and pathology with excellent soft-tissue contrast but causes of its cost ultrasound approach is to prefer. The operation is effective and safe for experienced surgeons.