Urethral diverticulum by three-dimensional transvaginal sonography: a case report
L. Qiu, M. Zhang, H. Luo  Department of Ultrasound, Sichuan University, West China Second University Hospital, China.

Case
A 37-year-old female presented to routine transvaginal sonography because of urinary incontinence for almost one year. Two-dimensional transvaginal sonography demonstrated a 3 cm septal cyst lesion adjacent to the middle part of urethra, the cystic fluid was clear, and the blood flow could be detected on the wall of the cyst with the color Doppler. Three-dimensional tomographic transvaginal ultrasound detected that the cyst surrounded the middle part of urethra nearly in a circle (Fig. 1), and at three-o’clock the urethra was communicating with the cyst through a small orifice (Fig. 2), which was diagnosed as the urethral diverticulum. Cystoscopy was later performed for confirmation.

Discussion
Urethral diverticulum should be excluded in female patients who present with chronic or nonspecific lower urethral symptoms. Three-dimensional transvaginal sonography is able to diagnose urethral diverticulum, which can show the location of diverticulum and the relationship to other pelvic parts. Other advantages are noninvasive, inexpensive and good repeatability.