INCONTINENCE SLING-RELATED URETHRAL DISTORTION

Researchers in the USA suggest a link between distortion of the urethra and the voiding dysfunction sometimes experienced after placement of a midurethral sling (MUS), on the basis of their data published in the April issue of the *Journal of Urology*.

Integral theory states that midurethral angulation during straining is necessary for continence after sling surgery. However, the authors of this study have previously observed that patients presenting with new onset lower urinary tract symptoms (LUTS) after MUS insertion often exhibit pronounced urethral kinking with proximal ballooning of the urethra and bladder neck on voiding cystourethrography (VCUG). Here, they report the association between this obstruction and voiding parameters in affected patients.

The retrospective study included women who were referred for sling excision after presenting with new onset LUTS (n=64), 51 of whom had urethral distortion on VCUG. Investigators compared questionnaire data (on quality of life, incontinence impact and urogenital distress) and the results of urodynamic testing in those with and without urethral distortion.

While similar questionnaire scores were reported in both groups, detrusor pressure at maximum flow and post-void residual volume were much higher in the patients with urethral distortion although neither difference attained statistical significance, probably owing to small sample size. Regardless, this finding might be a cause for concern; long-term increases in voiding pressure and urine retention can lead to the need for intermittent catheterization and, in some cases, irreversible damage to the bladder wall.

Importantly, flow rates were similar in both groups, leading the authors to suggest that urodynamic parameters might be better indicators of voiding dysfunction caused by sling placement.

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Original article Murray, S. M. *et al*. Urethral distortion after placement of synthetic mid urethral sling. *J. Urol.* **185**, 1321–1326 (2011)

RESEARCH HIGHLIGHTS