Category: D) Urodynamics
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VIDEOURODYNAMICS IN WOMEN WITH INCONTINENCE: CORRELATION WITH ABDOMINAL LEAK POINT PRESSURE MEASUREMENTS.

Aims of Study Stress urinary incontinence may be caused by urethral hypermobility, intrinsic sphincter deficiency (ISD), or a combination of both. Identification of an open bladder neck at rest on videourodynamic studies (VUDS) is diagnostic of ISD in women, and the "gold standard." A valsalva leak point pressure (VLPP) 65cm H_2O is also considered suggestive of ISD. We reviewed VUDS and VLPPs to determine the correlation of findings and express the probability of having an open bladder neck when taking VLPP into account.

Methods The VUDS and VLPPs of 132 adult women who demonstrated stress incontinence were retrospectively reviewed. All women with prolapse were reduced prior to VLPP. All patients were stratified into "open" or "closed" bladder neck categories, depending on the interpretation of VUDS by a single senior reviewer (KJK). Mean VLPPs for each group were compared using the Kruskal-Wallis test Logistic regression was used to calculate a coefficient for VLPP, which was used to determine risk ration of having open or closed bladder neck.

Results Forty-nine of 132 patients had closed bladder necks on VUDS, with a mean VLPP of 87cm H_2O (95% confidence, 77-97cm H_2O). Eighty-three of 132 patients had open bladder necks at rest on VUDS, with a mean VLPP of 67cm H_2O (95% confidence, 61-74cm H_2O). Differences in mean VLPP were highly statistically significant (P,0.0027) between groups. Predicted probability of an open bladder neck versus VLPP is not less than 50% until 100cm H_2O. At a VLPP of 120cm H_2O, a closed bladder neck was falsely predicted on VUDS in 36% of patients with our model.

Conclusions VLPP alone was not predictive of VUDS in this series. Although the mean VLPP between groups was statistically significant, there is a continuum between pure ISD and stress urinary incontinence due to hypermobility. If surgical intervention other than pubovaginal sling is entertained, both VLPP and VUDS should be performed preoperatively.

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