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Title (type in
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LETTERS)THE SUPINE STRESS TEST: A SIMPLE METHOD TO DETECT
INTRINSIC URETHRAL SPHINCTER DYSFUNCTION

Aims of Study: A new clinical test for intrinsic urethral sphincter dysfunction (ISD) is proposed and compared to abdominal leak-point pressure determination by video urodynamics.

Methods: Patients were prospectively included in the study if they were experiencing the symptoms of stress urinary incontinence and were to undergo video urodynamic testing. Patients with urinary tract infection and those with significant cystocele, rectocele, and vaginal vault prolapse were excluded. A supine stress test using both cough and valsalva maneuvers was performed after filling the bladder to 200 mL with sterile normal saline solution by gravity. Efflux of the bladder solution from the meatus coinciding with the cough or Valsalva maneuver indicated a positive clinical test. A video urodynamic study including abdominal leak-point pressure (ALPP) was performed. ISD was diagnosed if ALPP was < 100 cm H₂O. Test indices were calculated based on the results of the supine stress test and the ALPP measurements.

Results: Of the 41 consecutive patients studied, 30 patients were positive on the supine stress test, and 11 patients were negative. Using ALPP measurement, the supine stress test was found to have 93.5% sensitivity, 90.0% specificity, 96.7% positive predictive value, and 81.8% negative predictive value for detecting ISD.

Conclusions: The supine stress test is an easy, quick, and inexpensive clinical test to perform. A positive supine stress test is a reliable predictor of ISD. A negative test is highly correlated with the absence of ISD during the video urodynamic testing. In diagnosing ISD, this test is more reliable than other non-urodynamic tests described in the literature. Together with the cotton-swab testing for urethral hypermobility, the supine stress test can serve as a useful supplement in determining the appropriate management for stress urinary incontinence due to urethral dysfunction.