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Title (type in  
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LETTERS)EVALUATION OF STRESS URINARY INCONTINENCE : DOES A  
SIMPLE FILLED STRESS TEST CORRELATE WITH URODYNAMIC  
PARAMETERS?

**AIMS OF STUDY:** A "filled stress test" is a noninvasive adjunct to the physical examination in women complaining of incontinence. We correlated the results of FST with sophisticated urodynamic testing including valsalva leak point pressures.

**METHODS:** Between 1997-1998 charts of 219 consecutive female patients (mean age 69 years, range 35-91) with complaints of stress urinary incontinence (SUI) were retrospectively reviewed. Supine and upright stress testing was elicited by one examiner (SP) after 200 cc bladder filling. Videourodynamics testing with water cystometry was completed in 169 patient. A vLPP determination (cough and strain) was performed during multichannel urodynamics with 200 cc in the bladder. Select patients underwent cystoscopy as indicated. Correlations were made between the leakage at physical examination and urodynamic findings.

**RESULTS:** Urodynamic testing was completed in 169 patients and revealed: SUI 126(75%), detrusor instability 9(5.3%), and normal study 34(20%). 126 patients had genuine SUI on UDS, all of whom had post void residuals of <100cc. 99(79%) patients leaked in the supine and upright positions on physical examination. 7(7.0%) patients had vLPP  $\leq$  60 cm water, 28 (28%) had vLPP 60-90 cm water, and 64(65%) had vLPP >90 cm water. 19(15%) patients leaked in the upright, but not in the supine position. Their distribution was similar; the most common vLPP was >90 (74%). Five patients (4.0%) undergoing UDS leaked in the supine, but not in the upright position. Of the entire cohort 44 (18%) patients did not leak in the supine or upright position on physical examination. 26/44 underwent UDS and only 3 of these patients had genuine SUI. The negative predictive value (NPV) of the filled stress test was 73%. The sensitivity of the filled stress test predicting any degree of genuine SUI was 95%; the specificity was 86%. However no correlation could be made between FST and the value of vLPP.

**CONCLUSIONS:** Careful physical examination and assessment of leakage in the supine and upright position does not correlate with vLPP. Nonetheless, the filled stress test has a fairly high NPV (73%) and is also helpful in predicting those patients who have SUI. However in patients with a strong clinical suspicion of SUI, examination must be used in conjunction with urodynamic testing to quantify the degree of urinary leakage, especially if definitive surgical treatment is planned.