

DOES VIDEOURODYNAMIC CLASSIFICATION DEPEND ON PATIENT POSITIONING IN PATIENTS WITH STRESS URINARY INCONTINENCE?

Hypothesis / aims of study

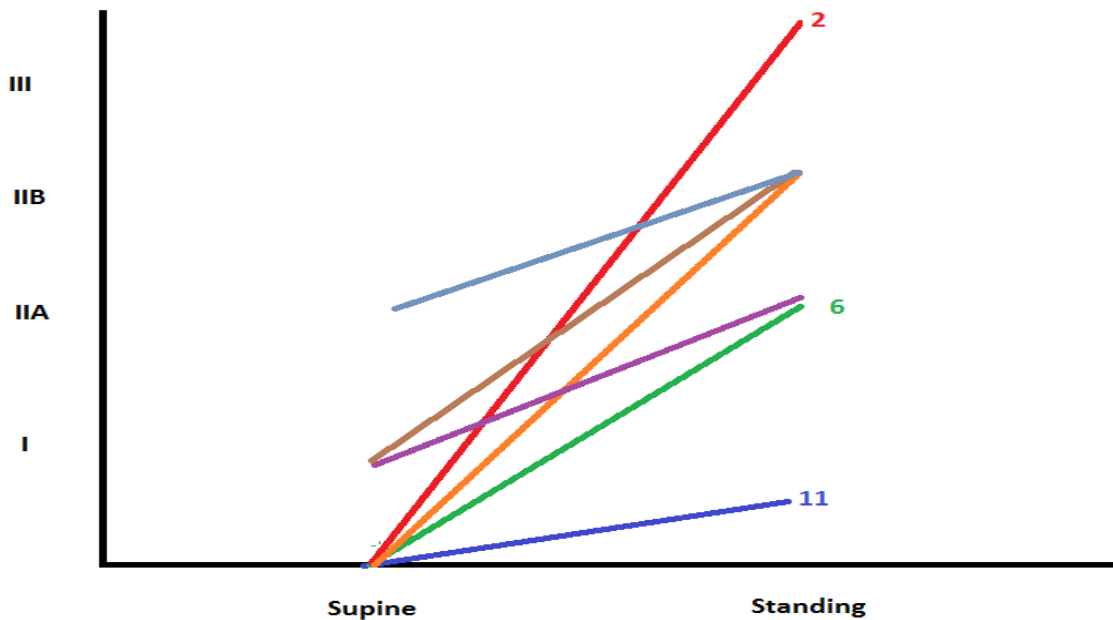
The treatment of stress urinary incontinence (SUI) is based on the degree of hypermobility and intrinsic sphincter deficiency most commonly assessed by videourodynamic study. The most common classification of SUI by Blaivas-Olsson is described in the semi-oblique position. However, most urodynamics are performed supine or standing with advocates of standing position suggesting that this stance permits gravity to enhance prolapse and aid diagnosis. We assessed the difference in Blaivas-Olsson grading in either positions.

Study design, materials and methods

121 consecutive women with SUI underwent videourodynamic study prior to operative intervention. SUI was assessed in both supine and standing positions and the extent of descent was classified according to Blaivas-Olsson criteria. Differences between the positions was assessed using Fisher's exact test with $p < 0.05$ being significant.

Results

72 of 121 classifications remained the same in both lying and standing positions. 49 gradings were upgraded with position (40%), but no patients were downgraded. Of the 49 patients whose grading changed, 20 (16.5%) had non-demonstrable SUI converted to demonstrable (i.e. grade 0 converted to I, IIa, IIb or III); 22 patients with SUI in the supine position were upgraded by one grade (I –IIa (10) and IIa-IIb (12)) and 7 were upgraded by two grades from I to IIb (Figure). The difference in the distribution of SUI grading between supine and standing positions was statistically significant ($p < 0.01$)



Blaivas grading supine	0	0	0	0	I	I	IIa
Blaivas grading standing	I	IIa	IIb	III	IIa	IIb	IIb
No of patients	11	6	1	2	10	7	12

Figure 1: analysis of Blaivas Olsson grading change with patient position

Interpretation of results

16.5% of patients only had SUI demonstrable in the standing position. 40% Blaivas-Olsson classifications were upgraded with patients in the standing position. This has important implications for practice.

Concluding message

We suggest that videourodynamics are performed using standardised methodology in both lying and standing position to best replicate symptoms, and minimise the chance of underestimating both incontinence and the degree of descent.

References

1. Blaivas JG, Olsson CA. Stress incontinence: classification and surgical approach. The Journal of urology. 1988 Apr;139(4):727-31.

Disclosures

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