

Poor correlation of Blaivas-Olsson and defecating MRI proctography bladder neck descent in the assessment of

recurrent stress urinary incontinence (SUI)

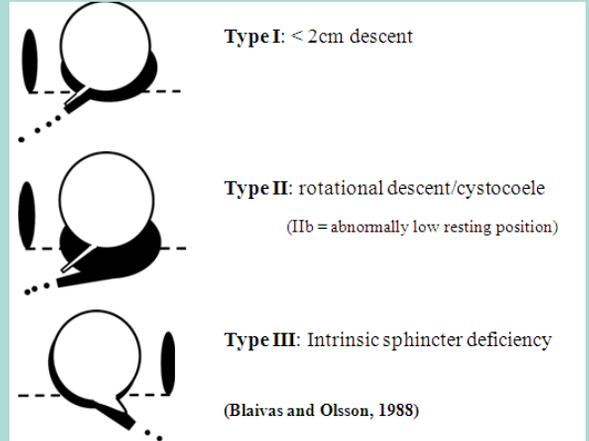
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Introduction

- Management of SUI is based on assessment of anterior descent (hypermobility) often on videourodynamics (VUDS)
- MRI defecating proctography (MRI-DP) is gaining popularity in assessing patients with significant pelvic floor dysfunction, but has not been used for (recurrent) SUI assessment.
- We compared bladder neck descent observed on these two modalities.

Blaivas Olsson (BO) Grading system (1988)

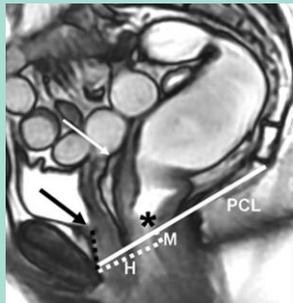


MRI-DP assessment

Pubococcygeal line (PCL): level of pelvic floor

Normal position of:

- Bladder base (black arrow)
- Vaginal vault (white arrow)
- Anorectal junction (star)



+MRI-DP anterior descent assessed by bladder neck position relative to pubococcygeal line

Materials and methods

- + 32 women with recurrent SUI over one year underwent VUDS and MRI-DP
- + Mean age 58 (34 - 79)
- + 2 (0 - 9) previous interventions
- + VUDS assessed using standard Blaivas-Olsson criteria to assess bladder neck descent
- + MRI-DP anterior descent assessed by bladder neck position relative to PCL
- + Compared using Pearson's chi-squared test

Results

- + No correlation between bladder neck descent on VUDS and MRI-DP

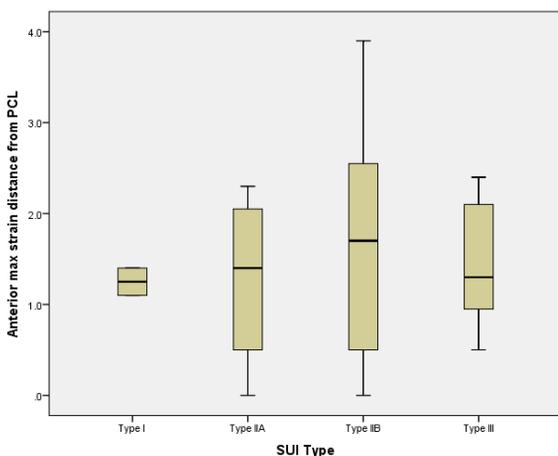


Figure 1: Correlation between BO SUI type on VCMG and maximum descent relative to PCL on MRI-DP.

Conclusion

- + First ever description of MRI proctography to assess descent in recurrent SUI
- + **Poor correlation with Blaivas-Olsson classification**
- + May be useful to guide further intervention in SUI patients.
- + But further investigation needed to establish additional utility over VUDS

References : Blaivas, J. G., and C. A. Olsson. "Stress incontinence: classification and surgical approach." *The Journal of urology* 139.4 (1988): 727-731.