

POOR CORRELATION OF BLAIVAS-OLSSON AND DEFECATING MRI PROCTOGRAPHY BLADDER NECK DESCENT IN THE ASSESSMENT RECURRENT STRESS URINARY INCONTINENCE

Hypothesis / aims of study

The management of stress urinary incontinence (SUI) is based on videourodynamic study (VUDS) to assess the extent of anterior descent (hypermobility). MRI defecating proctography (MRI-DP) is gaining popularity in assessing pelvic floor support in patients with significant pelvic floor dysfunction, but has not been used for (recurrent) SUI assessment. We have compared the extent of bladder neck descent observed on these two modalities.

Study design, materials and methods

Patients referred with recurrent SUI over a 1-year period underwent VUDS and MRI-DP. Patient demographics including number and type of previous interventions were recorded. SUI demonstrated on VUDS was categorized using the Blaivas-Olsson Classification. MRI-DP anterior descent was evaluated using bladder neck position relative to the pubococcygeal line. A One Way ANOVA was used to compare the mean MRI-DP anterior descent differences between Blaivas-Olsson groups

Results

32 patients over a 12-month period were evaluated. Mean age was 58 (range 34-79) and patients had mean of 2 previous interventions (range 0-9). Results are shown in Figure 1. There were considerable variations in the extent of bladder neck decent MRI-DP compared to VUDS classification. There is no statistical difference in the anterior compartment decent on MRI-DP between the various SUI classifications ($p=0.271$).

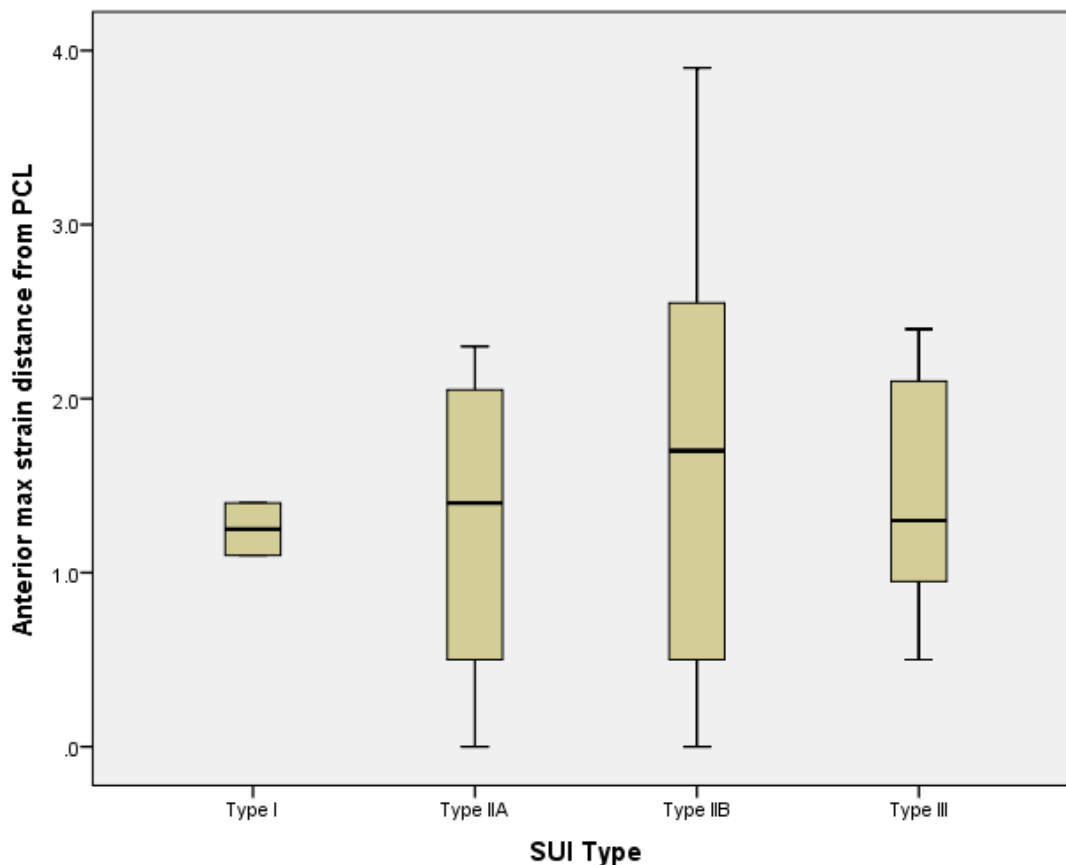


Figure 1. Box plots showing the distribution of both anterior maximum descent relative to PCL on MRI for the four SUI types.

Interpretation of results

This is the first ever description of MRI proctography to assess descent in patients with recurrent SUI. There was poor correlation with Blaivas-Olsson classification..

Concluding message

MRI proctography may have important utility guiding further intervention in this complex patient group, but further work is required to assess any additional utility over videourodynamics

Disclosures

Funding: nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective review **Helsinki:** Yes **Informed Consent:** Yes