

ARE PRE-OPERATIVE URODYNAMIC STUDIES (UDS) USEFUL FOR PATIENTS AWAITING PELVIC ORGAN PROLAPSE (POP) SURGERY?

Hypothesis / aims of study

The coexistence of POP and stress urinary incontinence (SUI) has been well documented in numerous studies^[1,2]. The concurrence rate of these two conditions is over 60%^[2] and over a third of patients who need surgery for either condition require concomitant surgery^[2]. A urodynamic study (UDS) is performed in patients with POP to ascertain the underlying pathophysiology of urinary incontinence to allow for an appropriate management plan to be devised^[3]. The aim of this audit was to identify how pre-operative UDS influences the decision for concomitant continence procedure for women who have POP surgery.

Study design, materials and methods

This was a retrospective study of patients who had POP surgery and underwent preoperative urodynamics. Patients with symptomatic POP (requiring surgery) who also had stress urinary incontinence (SUI) were referred for UDS to determine whether a concomitant continence procedure would be appropriate at the time of the POP surgery. The audit data was obtained from the notes of these patients and entered into a Microsoft Excel sheet. The data included what their urinary symptoms were, UDS diagnoses and the type of surgery performed and any concomitant procedures. The study analysed whether the urodynamics diagnosis had informed the choice of surgical procedure performed. Pessaries were used during UDS only if patients had POP stage III and IV.

Results

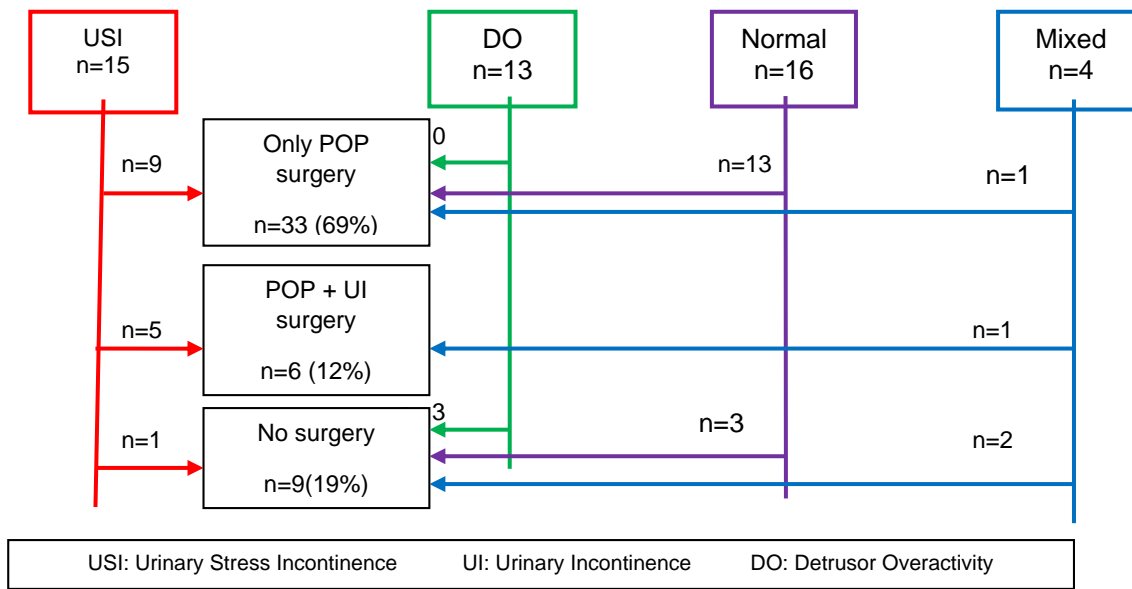


Figure 1: UDS diagnosis & resulting procedure performed in patients awaiting POP surgery with SUI

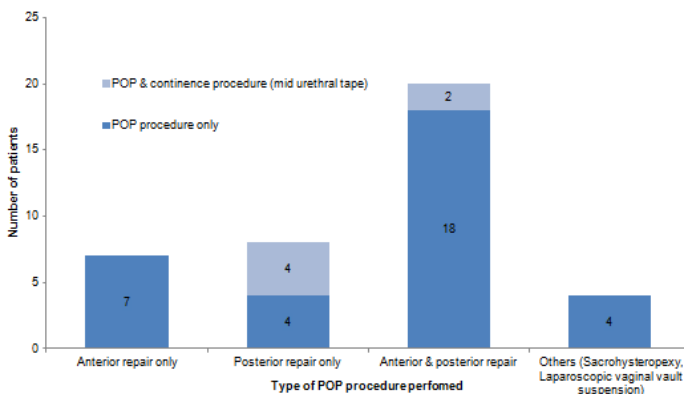


Figure 2: Outcomes of UDS in patients awaiting POP surgery with SUI

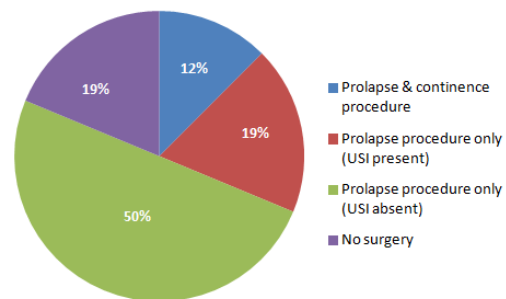


Figure 3: Procedures performed following UDS

Interpretation of results

33 of the 48 patients (69%) had only a POP repair done despite the fact that 9 of these patients were found to have USI on UDS (Fig. 1). Of the 48 patients who underwent pre-operative UDS, only 6 (12%) went on to have a concomitant procedure (Fig. 2). Concomitant surgery was not performed in these patients as symptoms were either not very bothersome to the patient, there were concerns about the risk:benefit ratio of the continence procedure or the patient opted to have a continence procedure at a later date if required. Up to the publication of the current results, no patient went on to have an interval continence procedure.

Concluding message

Only 12% of women with combined prolapse symptom requiring surgery and stress urinary incontinence required concomitant procedures. Women awaiting prolapse surgery who are symptomatic of stress urinary incontinence should be fully counselled regarding the potential of a concomitant continence procedure prior to referral for urodynamics. Further research is required to identify the characteristics of patients who would choose a concomitant versus a possible interval procedure.

References

1. Bai SW, Jeon MJ, Kim JY, Chung KA, Kim SK, Park KH. Relationship between stress urinary incontinence and pelvic organ prolapse. *Int Urogynecol J.* 2002; 13:256-230
2. Hart SR, Moore D, Miklos JR, Mattox TF, Kohli N. Incidence of concomitant surgery for pelvic organ prolapse in patients surgically treated for stress urinary incontinence. *The Journal of Reproductive Medicine.* July 2006; 51: 521-524
3. Bosch JLHR, Cardozo L, Hashim H, Hilton P, Oelke M, Robinson D. Constructing trials to show whether urodynamic studies are necessary in lower urinary tract dysfunction. *Neurology and Urodynamics.* 2011; 30:735-740

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it was a retrospective analysis of patient's data **Helsinki not Req'd:** it was a retrospective analysis of patient's data **Informed Consent:** No