

ROLE OF URODYNAMICS STUDY IN MEN WITH LOWER URINARY TRACT SYMPTOMS OR ACUTE URINARY RETENTION. CAN TURP BE AVOIDED?

Hypothesis / aims of study

In men with lower urinary urinary symptoms (LUTS) refractory to medical therapy, or acute urinary retention (ARU) due to bladder outlet obstruction (BOO) from benign prostatic enlargement (BPE), transurethral resection of prostate (TURP) has significant chance of improving the symptoms. However, similar symptoms can be due to bladder dysfunction, such as detrusor underactivity (DUA). In such cases, TURP may not resolve the symptoms. Patients with evidence of bladder outlet obstruction (BOO) on urodynamics studies (UDS) have better surgical outcomes compared to those without. There is currently insufficient data to support routine UDS prior to TURP. This study aims to look at the UDS profile of men presenting with LUTS and/ or ARU and to define the role of UDS prior to TURP.

Study design, materials and methods

We retrospectively reviewed men who underwent UDS from 1st January 2012 to 31st December 2015. Inclusion criteria were men who underwent UDS for either LUTS refractory to medical treatment, or recurrent acute urinary retention. Exclusion criteria included men with known history of neurogenic bladder and men with previous urological surgery to the prostate or urethra. All UDS studies were performed according to International Continence Society (ICS) standards. The UDS findings were analysed and correlated with the patients' demographic profile, presenting symptoms and management decisions.

Results and interpretation of results

47 patients were included in the study. All patients had both storage and voiding symptoms. The mean age of patients was 69.5 years (range 48-93 years). 25 patients presented with LUTS refractory to medical therapy (53.1%) and 22 patients presented with ARU (46.8%). 18 patients had findings of BOO on UDS (38.3 %). Additionally, evidence of bladder dysfunction was noted in 39 patients (83.0%). These include presence of detrusor underactivity (DUA) in 15 patients (31.9%) and detrusor overactivity (DO) with or without leak in 24 patients (51.1%). Following UDS, 8 patients with confirmed diagnosis of BOO underwent TURP (17%), and 39 patients had conservative management (83%). 4 patients in our series had UDS diagnosis of BOO and detrusor overactivity incontinence (DOI). Among the 15 patients with DUA, the mean age of the patients was slightly older at 72 years (range 48-93 years). 7 patients had diabetes mellitus (46.7 %), 2 patients had Parkinson's disease (13.3%), 2 patients had previous stroke (13.3%) and 3 patients had no discernable cause. (20%).

Concluding message

TURP was avoided in about 30% of patients who demonstrated DUA on UDS. Diabetic cystopathy was the most common cause of DUA in our series. Additionally, four patients with BOO and DOI decided againsts proceeding with TURP as they were unwilling to accept risk of worsening incontinence. This series raises the awareness of bladder dysfunction in men presenting with LUTS and ARU. BOO is not always the sole cause of LUTS symptoms or ARU and hence offering TURP may not be appropriate. From this study, we recommend a practical approach to performing UDS in a select group of patients who are older and/ or with background history of diabetes or neurological conditions in order to optimise pre-surgical counselling and surgical outcome.

Disclosures

Funding: Local hospital retrospective study. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** . **Helsinki:** Yes **Informed Consent:** Yes