

CYSTODISTENSION FOR BLADDER STORAGE SYMPTOMS? WHEN DO YOU DO IT? HOW DO YOU DO IT AND DOES IT REALLY WORK?

Hypothesis / aims of study

The aim of this study was to assess the efficacy of Cystodistension in patients with predominantly Storage Bladder Symptoms and a small bladder capacity.

We present the data analysis of mid term outcome of 55 females with severely bothersome predominantly storage bladder symptoms and urodynamic evidence of small capacity bladder during awake cystometry with or without hypo compliance during the filling phase with no obvious Detrusor Overactivity and no Urodynamic Stress Incontinence.

Study design, materials and methods

We retrospectively reviewed the case notes of 55 females being managed for severely bothersome Storage Bladder Symptoms and were refractory to conservative medical management of anticholinergics, bladder retraining, pelvic floor exercises and life style modifications.

Patients with painful bladders, cystoscopic evidence of Interstitial Cystitis /Hunners patches were excluded, as were patients with radiation cystitis, Urodynamic stress incontinence and Detrusor Overactivity. Cystodistension was carried out once or more for five minutes with simple hydraulic filling under gravity with a 100cms water column. The mean follow up period was 36 months (12-48months)

Results

From January 2005 till December 2007, 55 females were identified in this cohort of patients over a period of three years. There was predominance of Caucasians, 47 (85.5%)

with an average age of 57 (+/- 11.3) years. Overall (65.4%) 36 out of 55 showed marked improvement in the symptoms. Patients with awake maximum cystometric volume of less than 250 ml showed a significant improvement in volume on hydro distension ($p < 0.05$) as well as storage symptoms ($P < 0.05$) as compared to awake cystometric volume of 250 mls to 400 mls. (33.3%) 12 out of 36 patients requested a repeat procedure after 3-12 months due to recurrence of symptoms. Mild to moderate glomerulations and bloody effluent on decompression were noted in most patients.

All patients were discharged home on the same day with no reported adverse events needing readmission.

Interpretation of results

Having excluded, stress incontinence, urodynamic detrusor Overactivity, painful bladder syndromes, active interstitial cystitis/Hunners patches and radiation cystitis, two thirds of the patients with small capacity bladders during awake cystometry responded well to Cystodistension and 33.3% needed a repeat procedure. No major complications were noted.

Smaller bladder capacity had better clinical outcome.

Concluding message

With proper patient selection, Cystodistension is a safe and reasonably effective procedure for storage LUTS with urodynamic evidence of small capacity bladder with or without hypo compliance and no evidence of Detrusor Overactivity or Urodynamic Stress Incontinence. Two-thirds of the patients reported good response in the mid term follows up. We postulate a "disruption of Micro-trabeculations due to stretch" as a possible mechanism of action and are planning a prospective study in the near future. We inform our patients particularly about high failure rates and need for further treatments

References

1. British journal of urology 1974;46:645-652
2. Urology 1994;43:36-39
3. Eur Urol 1995;28:325-32

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Research and Development Department , Northern Lincolnshire and Goole Hospitals NHS Trust
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No