

CYSTODISTENSION; A SURVEY AMONG UK GYNAECOLOGISTS, UROGYNAECOLOGISTS AND UROLOGISTS

Hypothesis / aims of study

Cystodistension has been advocated as a diagnostic and/or therapeutic tool in patients with painful bladder syndrome, interstitial cystitis, refractory cases of detrusor overactivity and reduced bladder capacity. Literature search revealed no standardised technique for bladder distension and no randomised control studies to prove its efficacy. Success rates vary from 18% to 77% with reported complications of bladder perforation (5-10%), haematuria, and urinary retention.(1,2,3) The aim of this survey is to evaluate the current practice among the UK gynaecologists, urogynecologists and urologists with regards to the indications, technique of cystodistension in their practice and its benefits and complications.

Study design, materials and methods

Between July and September 2007, 486 questionnaires were posted to Consultant gynaecologists, urologists and urogynaecologists in the UK. The 16 questions in the survey asked clinicians about their views with regards to the role, indications, technique and outcome of cystodistension. The indications included were reduced bladder capacity, unstable bladder, interstitial cystitis investigations only, management only, investigations and management and other indications. Incomplete answers were labelled as missing data. Each of the questions in the survey was analysed separately, the data was then analysed using the SPSS software. Valid percentage for each question was counted excluding the missing data. The denominator is different for each question as the number of responses to each question is different.

Results:

189/486 (39%) questionnaires were returned; 58.8% of respondents were gynaecologists or urogynaecologists and 41.2% were urologists. 112 (63%) of respondents said that they perform cystodistension and a similar number said that it has a role in the management of urinary symptoms.

The most common stated indication to perform cystodistension was for both investigation and management of interstitial cystitis 82(43.4%) with more than half respondents grade it as the most likely indication. The other indications stated were reduced bladder capacity (40.7%), interstitial cystitis investigation only (36%), unstable bladder (35.4%) and interstitial cystitis treatment (30.2%). Other indications reported were painful bladder symptoms, sensory urgency and frequency.

Most of the respondents 95.9% performed cystodistension under general anaesthetic. Most 96% distended the bladder for <20 minutes and about two thirds of respondents distended the bladder only once during the procedure. The majority (90%) performed cystodistension with variable volume; 76.6% determined the volume by observing the fluid leaking back. Complications were encountered by 27.4% of the respondents and these include infection (12.4%), haematuria and bleeding (9.7%) and bladder rupture (4.4%). 76.3% of respondents found the procedure to be beneficial, 14% found the benefit variable and 9.7% found the procedure of no benefit at all. Most of the respondents said that the benefit was variable and less than 12 months in duration.

Interpretation of results:

The survey responses confirmed the lack of agreement on how to perform cystodistension. The cystodistension technique has not been standardised as shown by the different responses received from different clinicians.

The literature includes prospective studies of prolonged bladder distension in detrusor overactivity, interstitial cystitis and other painful bladder symptoms.(1,2,3) In contrast there is only one reported study of short duration bladder distension. (2) Some studies suggested that prolonged bladder distension is a simple technique which offers marked degree of improvement in symptoms in cases of urge incontinence, associated bladder instability and in cases of interstitial cystitis.

In this survey, most common indication to perform cystodistension was interstitial cystitis both, for diagnosis and treatment followed by reduced bladder capacity and overactive bladder. Most of the respondents performed short duration cystodistension as only 4% performed it for more than 20 minutes. Significantly more urologists thought that cystodistension had a role compared to the gynaecologists (82.5% and 55.6% respectively p=0.0005). Similarly significantly more number of urologists were likely to perform cystodistension than the gynaecologists (84.1% and 54.4% respectively p=0.0001). This comparison was made after excluding the incompletely filled questionnaires and applying Fisher's exact test to the 2x2 contingency table.

Concluding message

It appears that cystodistension has a role in practice however its indications and benefits are still controversial. The procedure has not been yet standardised and therefore it is difficult to compare different studies or to draw conclusions with regards to its benefits.

References

- 1) British journal of urology 1974;46:645-652
- 2) Urology 1994;43:36-39
- 3) Eur Urol 1995;28:325-327

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