

PROLONGED PRESSURE-CONTROLLED BLADDER HYDRODISTENSION FOR CHRONIC INTERSTITIAL CYSTITIS – REPORT OF A NEW TECHNIQUE

Hypothesis / aims of study

Interstitial cystitis (IC) can be an extremely debilitating condition. It does not always respond to behavioral and oral therapy. Intravesical therapy, including bladder hydro distension has been described for the management of IC since 1922. Hydrodistension has been used commonly for short periods of up to 8-10 minutes with mixed and transient results. We report on a technique of prolonged bladder distension used on patients with refractory IC and the symptomatic relief and outcomes from this technique.

Study design, materials and methods

All patients had been diagnosed with IC with a mean duration of 10.5 years. The diagnosis of IC was biopsy proven in 37.5% with biopsy exclusion of other pathology and urinary tract infections in all patients. The process of prolonged bladder hydrodistension began with a cystoscopy. A concurrent epidural or spinal anaesthetic is used to maintain adequate analgesia. Following the cystoscopy, the bladder was hydro-distended for four hours at 70 cm water pressure. The procedure was performed as a day case. A retrospective review of 13 patients with IC on the prolonged bladder distension program was undertaken. All patients completed a questionnaire on their symptomatic relief achieved following the intervention, and alterations in bladder capacities, flow rate and residual urine were reviewed. The complications are reported.

Results

All patients had been diagnosed with IC with a mean duration of 10.5 years. The 13 patients all tolerated the procedure well. A total of 57 hydro distensions have been carried out in eight patients. Following treatment, the majority of patients suffered transient dysuria and frequency for 2 days. Prolonged pressure controlled bladder hydrodistension had no effect on urinary stream, urgency or post void residuum. The global response assessment for prolonged hydro- distension in regards to the symptoms that the patient's presented with demonstrated markedly improved symptoms in all but two patients who had moderate improvement. All patients described a decrease in the urinary symptoms and abolition of bladder pain. The improvement in symptoms lasted for between 3 and 18 months with a mean of 12 months.

	Pre treatment	Post treatment
Day time frequency	½ hourly	4 hourly
Night time	7.6 x	1.5 x

There were 2 complications. One involved an incomplete spinal anaesthetic, instead requiring intravenous analgesia to complete the 4-hour distension. One patient had a small bladder rupture laterally, treated by and indwelling catheter for 7 days without further ramifications and uneventful further treatments.

Interpretation of results

These results have been achieved in a small group of chronic IC patients who were originally referred for possible urinary diversion.

Concluding message

Prolonged bladder distension is a well-tolerated procedure with excellent improvement in patient symptoms from IC. It has been used reliably in 13 patients on a regular basis who had been refractory to all other forms of treatment. For these patients this procedure has avoided a cystectomy or urinary diversion for many years.

Disclosures

Funding: Self-funded **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Prince of Wales Hospital ethics Committee **Helsinki:** Yes **Informed Consent:** Yes