

CLINICAL STUDY ON EN BLOC CYSTOURETHRECTOMY FOR INTRACTABLE INTERSTITIAL CYSTITIS

Hypothesis / aims of study

To discuss the indications of en bloc cystourethrectomy for intractable interstitial cystitis through a summary of the data of 3 women suffering severe cystalgia and/or urethralgia.

Study design, materials and methods

Three female patients aged 68, 72, and 58 years old had characteristic symptoms of severe urinary frequency, urgency, suprapubic or perineal pain for 17, 20 and 11 years, respectively. The voiding diaries showed the micturition frequency could reach up to 30-40 voids/24 Hours. The patients scored full marks of 36 in the O'Leary-Sant Interstitial Cystitis Symptom Index (ICSI) and O'Leary-Sant Interstitial Cystitis Problem Index (ICPI) questionnaires. The Pelvic Pain and Urgency/Frequency Patient Symptom Scale (PUF) demonstrated they had severe symptoms. Three of them had extremely poor quality of life and had suicidal tendency. The medication history included taking antibiotics, antispasmodics, antidepressants, analgesics and traditional Chinese medicine etc. A final diagnosis was made through hydrodistension under general anesthesia. There were extensive glomerulations, local laceration in the mucosa, and one patient with ulceration, the other two with no ulceration via distention of the bladder with cystoscopy. The bladder volume was less than 100ml before hydrodistension in the 3 patients and achieved 250ml, 280ml and 400ml respectively after hydrodistension (distention of the bladder for 2 minutes at 90cmH₂O). The idiopathic infection or tumor was excluded via multiple-site biopsy. One patient was given intravesical injections of botulinum A toxin (BTX-A) 2 times within 6 months after IC diagnosis and had pain relief for 2 months after the first injection but ineffective after the second injection. Later she had 9 successive intravesical instillations of hyaluronic acid (Cystistat) and finally discontinued due to its ineffectiveness. The other 2 patients were given 1 and 6 intravesical instillations of hyaluronic acid respectively and also discontinued due to its ineffectiveness. Subsequently they all required surgical treatment.

Results

The 3 patients were followed-up for 11months, 11months and 9 months, respectively. There was no suprapubic or perineal pain and their life almost returned to normal.

Interpretation of results

The 3 patients had en bloc cystourethrectomy after excluding psychical factors and getting written informed consent. During the operation we mobilized the urethra and bladder completely through an incision of the anterior vaginal wall and resected them totally. And ileocystoplasty was undertaken for urinary diversion. There was no bladder wall thickening; the texture was soft in the resected bladders sample. There was some hemorrhage in the mucosa, and mucosal ulceration was seen in one patient. The bladder biopsies showed inflammatory cell infiltration into the muscular layers. In 2 patients there was mast cell infiltration and chronic inflammation in the urethral mucosa. Under conscious condition the patients reported complete pain relief in the first postoperative day.

Concluding message

Patients with long course of disease, small bladder volume after hydrodistension and severe suprapubic or perineal pain have extremely poor quality of life and refractory to conventional treatments. For such patients, we advocate relieving the pain immediately and completely by en bloc cystourethrectomy, especially for the old patients. And the patients are very satisfied with the curative effect.

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<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Westchina Hospital, Sichuan University
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes