542

Nishikawa N[1], Saito R[1], Ueda T[2]
1. Department of Urology, Kohka Public Hospital, 2. Department of Urology, Kyoto City Hospital

KTP LASER ABLATION -FAVORABLE OUTCOME FOR HUNNER'S ULCER-

Hypothesis / aims of study
Interstitial cystitis(IC) is a disorder of the bladder characterized by urgency, frequency of urination and pelvic pain. Bladder hydrodistention is one of the standard treatments, but patients with ulcer have more severe symptom and are often refractory to medical treatment and hydrodistention. Some hopeful reports of ulcer ablation with neodymium (Nd): YAG laser have been published. However, as a late complication, bowel perforation has been reported, and safer method is required. We present a prospective study of ulcer ablation with KTP laser, which penetrates shallower than Nd: YAG laser.

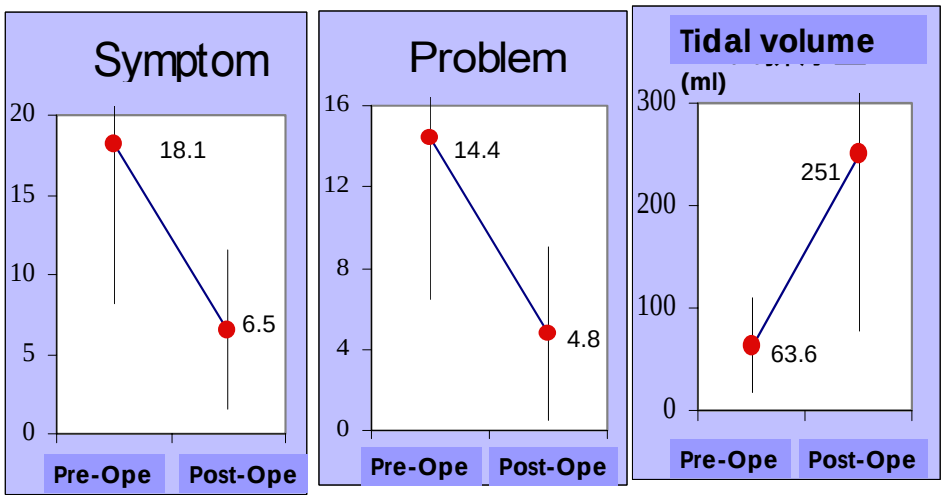
Study design, materials and methods
A series of 22 patients with ulcerative type of interstitial cystitis underwent ulcer ablation with the KTP laser. Medical treatment and hydrodistention had failed in all cases. Under spinal or general anaesthesia, the KTP laser ablation was performed with hydrodistention under cystoscopic control. Ulcer ablation was done before distension, and bleeding from ulcer during the distention was controlled with laser. The power setting was 5W. Symptoms were noted preoperatively and postoperatively (1 month), with the O'Leary-Sant (O-S) IC Symptom Index and IC Problem Index.

Results
All the patients had symptom improvement within a week after the treatment. At 1month after the ablation, The O-S symptom/problem pain score decreased from 4.2±2.7 / 3.4±2.3 to1.4±1.3 / 1.2±1.3 , and the total of the O-S symptom/problem score also decreased from 18.1±10.0/ 14.4±8.0 to 6.5±5.0 / 4.8±4.3. Tidal volume increased from 63.6±47.0 ml to 251±175 ml. Postoperative bleeding was noted in 5 patients, and 1 had clot retention, but relieved without any treatment. However, 7 patients, who got bacterial cystitis (5 patients) and/or severe ulceration (1 patient), had relapse of symptoms and 2 patients required additional hydrodistention and laser ablation. Other serious complications, including bladder rupture and bowel perforation, were not encountered.

Interpretation of results
KTP laser ablation can safely achieve good symptom palliation, including bladder pain. Bacterial cystitis is thought to be the most important risk factor of relapse of symptom.

Concluding message
KTP laser ablation is a safe and excellent treatment of ulcerative type of IC. It can relieve patients' symptoms, and further investigation must be needed.

Symptom/Problem index and Tidal volume



(p<0.01) **(p<0.01)** **(p<0.001)**