

## WHAT IS THE BEST TREATMENT FOR INTERSTITIAL CYSTITIS WITH HUNNER'S ULCER?

### Hypothesis / aims of study

Interstitial cystitis (IC) is a severe bladder disease of unknown etiology with no cure. IC can be classified into two rather distinct groups, with and without Hunner's ulcer. The treatment of IC with ulcer is more difficult compared with the disease with no ulcer.

We investigated the efficacy of several treatments for the IC patients with ulcer, retrospectively.

### Study design, materials and methods

Fifteen IC patients with Hunner's ulcer received hydrodistension from August to December, 2003. They were treated by intravesical DMSO after hydrodistension once every two weeks 8 times and thereafter once every four weeks (A group). Next twenty one patients received hydrodistension from January, 2004 to March, 2005 without being treated with DMSO (B group). Another fourteen patients were received transurethral coagulation (TUC) without hydrodistension from April, 2005 to February, 2006 (C group). Recent 6 patients from May, 2006 were treated by TUC combined with hydrodistension (D group).

All of the patients recorded frequency-volume charts for four days and the O'Leary-Sant index (ICSI / ICPI) and VAS for pain before and 2 and 6 months after surgery.

### Results

Both the average voiding volume (AVV) and the maximum voiding volume (MVV) increased and the ICSI / ICPI and VAS for pain decreased significantly at 2 and 6 months after surgery compared with those before surgery in all four groups. The AVV, the MVV and the ICSI / ICPI got worse at 6 months after surgery compared with them at 2 months in every group except A group. VAS for pain in all (A, B, C and D) group decreased significantly from 7.2, 5.9, 6.8, 5.3 to 1.4, 4.2, 2.8, 1.4 at 2 months after surgery, respectively ( $p < 0.001$ ) and changed to 1.7, 4.4, 4.3, and 3.1 at 6 months after surgery, respectively.

Nevertheless none in A group received the followed treatment within one year after the first hydrodistension, two patients had to receive the followed TUC within six months and one patient received one more hydrodistension within one year after the first hydrodistension in B group. And five patients in B group needed intravesical DMSO for their pain at about six months. In C group, four patients received the followed TUC combined with hydrodistension within one year and one patient used intravesical DMSO and one patient has lost because her symptoms recurred after TUC immediately. None of D group received the additional treatment within six months, but eight months after surgery three patients needed to use DMSO.

### Interpretation of results

Both hydrodistension and TUC for the IC patients with ulcer improved all parameter at 2 and 6 months after surgery compared with those before surgery. Some parameter got worse at 6 months after surgery compared with those at 2 months after surgery. This tendency was shown in B, C and D group. The pain was more intolerable rather than pollakisuria in most of the IC patients with ulcer and they hoped to receive the additional treatment for the recurrence of their pain.

### Concluding message

The efficacy of both hydrodistension and TUC for the IC patients with ulcer doesn't last more than six month. Even the combined therapy of hydrodistension and TUC is insufficiency in the long term. Some kind of maintenance therapy, like intravesical DMSO, is necessary for IC with Hunner's ulcer.

### References

**FUNDING:** none

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study was approved by the Ethics committee in Tokyo Women's Medical University and followed the Declaration of Helsinki Informed consent was obtained from the patients.