# 709

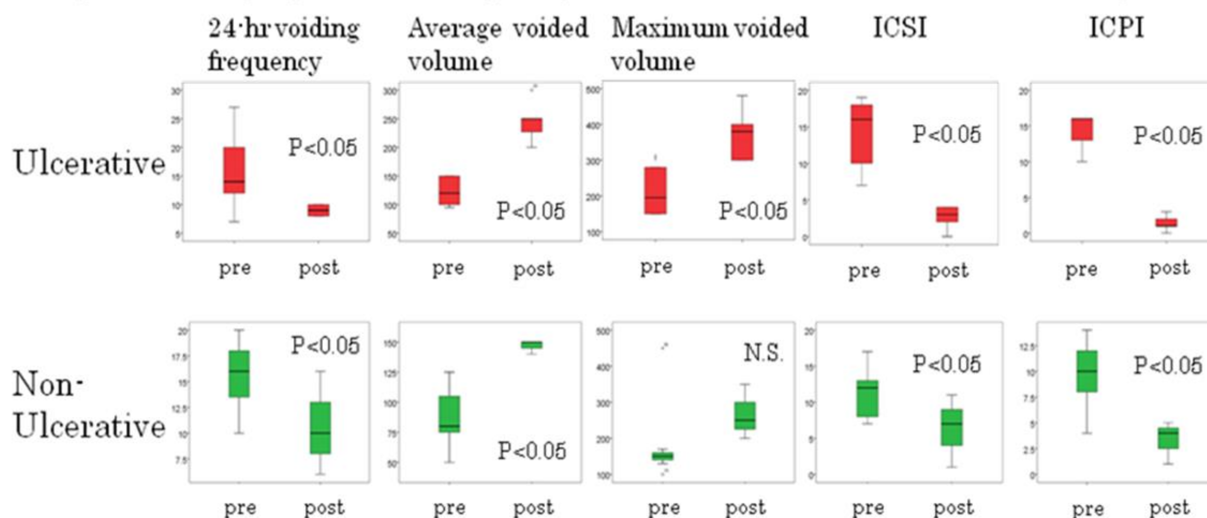
Yamamoto Y[1], Tsuda M[1], Daizumoto K[1], Kusuhara Y[1], Mori H[1], Shintani T[1], Fukawa T[1], Yamaguchi K[1], Fukumori T[1], Takahashi M[1], Kanayama H[1]
*1. Tokushima University*

## CLINICAL CHARACTERISTICS DIFFER IN ULCERATIVE AND NON-ULCERATIVE SUBTYPES OF INTERSTITIAL CYSTITIS/ BLADDER PAIN SYNDROME

Hypothesis / aims of study
Some differences between interstitial cystits/bladder pain syndrome (IC/BPS) subtypes (with and without Hunner's ulcer) have been noted. We investigated the clinical profile differences in two subtypes among patients with IC/BPS received hydrodistension at our institution.

Study design, materials and methods
An analysis of 56 patients with IC/BPS received hydrodistension from Dec 2004 to Jan 2016 was performed. Hydrodistension under anesthesia was carried out as guidelines made by society of interstitial cystitis of Japan. We performed the distension with a pressure of 80cm H20 twice per 3minutes. After the hydrodistension, we operated trans urethral coagulation (TUC) of the ulcer when Hunner's lesion was recognized. Before and 4 weeks after the intervention, the patients were assessed using O'Leary-Sant validated Interstitial Cystitis Symptom Index (ICSI) and Interstitial Cystitis Problem Index (ICPI) and a standard 3-day frequency volume chart.

Results
The median age of 56 patients was 65.5 (17-81) years old. Cystocopy findings after the hydrodistension, ulcerative IC/BPS was 22 (group1, male1, female 22), non-ulcerative was 31 (group2, male 8, female 23) and unclear was 4. The median age of patients was 72 (54-81) in group1, and 61 (17-81) in group2. Group1 was older than group2 for significant difference ($p<0.05$). There were more women in group1 than group2 ($p<0.05$). There was no difference by a group of symptom such as suprapubic pain associated with bladder filling, pudendal pain, urinary frequency. Patient's complications like hypertension, diabetes mellitus, thyroid disease, autoimmune disease, malignant neoplasm and gynecological disease was also same in both group.
Preoperative and postoperative ICSI, ICPI, 24 hour voiding frequency, average voided volume (AVV), and maximum voided volume (MVV) was similar in both group. The median instilled saline volume at hydrodistension was 470 (200-850) in group1, 525 (270-860) in group 2 ($p=0.07$).Bladder perforation was occurred at hydrodistension to 1 case in group1, and 3cases in group2 ($p=0.48$). After the operation the score of ICSI ($p<0.05$), ICPI ($p<0.05$), AVV ($p<0.05$) and 24-hour voiding frequency ($p<0.05$) was significantly improved in both group. MVV was increased significantly in group1 ($p<0.05$), but not in group2.




The recurrence was occurred 19cases (86.3%) in group1 and 20cases (64.5%) in group2 within 1year after the procedure. The recurrence rate was not significant. After the hydrodistension, conservative therapy like oral (Suplatast Tosilate, Imipramine, Pregabalin) and/or intravesical therapies(heparin and lidocaine) was done for almost the patients in both group.

Interpretation of results
Ulcerative IC/PBS was designed as an intractable disease last year in Japan. We should concern about the difference between ulcerative and non-ulcerative interstitial cystitis. Our results showed that ulcerative patients were older, and female patients were more. There was no difference in each group of hydrodistension procedure and the symptom before and after treatment. Hydrodistension was effective in both groups.

Concluding message
Hydrodistension under anesthesia was effective in spite of a presence of Hunner's ulcer. Many cases occurred recurrence after hydrodistension even if adjuvant treatment is performed, explication of the further clinical condition and development of an effective therapy are wished for.

References

1. Chrysanthopoulou E.L. and Doumouchtsis S.K. Challenges and Current Evidence on the Management of Bladder pain Syndrome. Neurourol Urodyn 2014; 33:1193-1201.
2. Logadottir Y., Delbro D., Lindholm C., Fall M. and Peeker R. Inflammation characteristics in bladder pain syndrome ESSIC type 3C/classic interstitial cystitis. Int J. Urol. 2014; 21: 75-78.
3. Killinger K.A., Boura J.A. and Peters K.M. Pain in interstitial cystitis/bladder pain syndrome: do characteristics differ in ulcerative and non-ulcerative subtypes? Int urogynecol J. 2013; 24: 1295-1301

Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Tokushima University hospital clinical study ethic screening committee **Helsinki:** Yes **Informed Consent:** Yes