#539 The influence of stressors on pain severity in patients with interstitial cystitis and bladder pain syndrome.

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Introduction

Interstitial cystitis (IC) and bladder pain syndrome (BPS) typically cause extremely uncomfortable bladder and urinary symptoms such as bladder pain, frequent urination, strong urge to urinate, and difficulty in voiding.

The AUA guidelines define IC/BPS as a chronic disorder and symptoms should be present for at least six weeks with documented negative urine cultures. (1)

The psychological distress of having symptoms that are difficult for others to understand and the inconvenience of daily living due to these symptoms can greatly impair quality of life.

Since it has been reported that physical or mental stress is involved in worsening symptoms of IC and BPS, (2) (3) we examined a correlation between degree of pain severity and stress factors in patients who were diagnosed as IC or BPS in our hospital for the past Twenty-two years.

Materials and Methods

We statistically studied the association of each factor including a pain scale with the stress factors (Divorce, bereavement, history of mental illness and cancer) by retrospectively observing patients diagnosed with IC and BPS between 2001 and 2022 at our hospital mainly using the Oleary-sant symptom index (OSSI) and problem index (OSPI).

The analysis was approved by the Ethics Committee of our institution and informed consent was performed on all patients. Data were analyzed using EZR(5), which is for R.More precisely, it is a modified version of R commander designed to add statistical functions frequently used in biostatistics.

Conclusions

In patients with IC and BPS, stressors were strongly associated with symptoms (especially pain).

There was no difference in the degree of post-treatment pain scale between patients with and without stressors, but the duration of response showed a predominant effect of treatment in the group with stressors indicated in figure 4.

Therefore it can be said that patients with stressors were more responsive to treatment and have more therapeutic significance. In addition, Niimi et al. (4) reported that symptoms were more severe in IC than BPS. The high percentage of IC patients with stressors also suggests that there is some association between IC and stress and pain.

Results

Flow chart of Selective

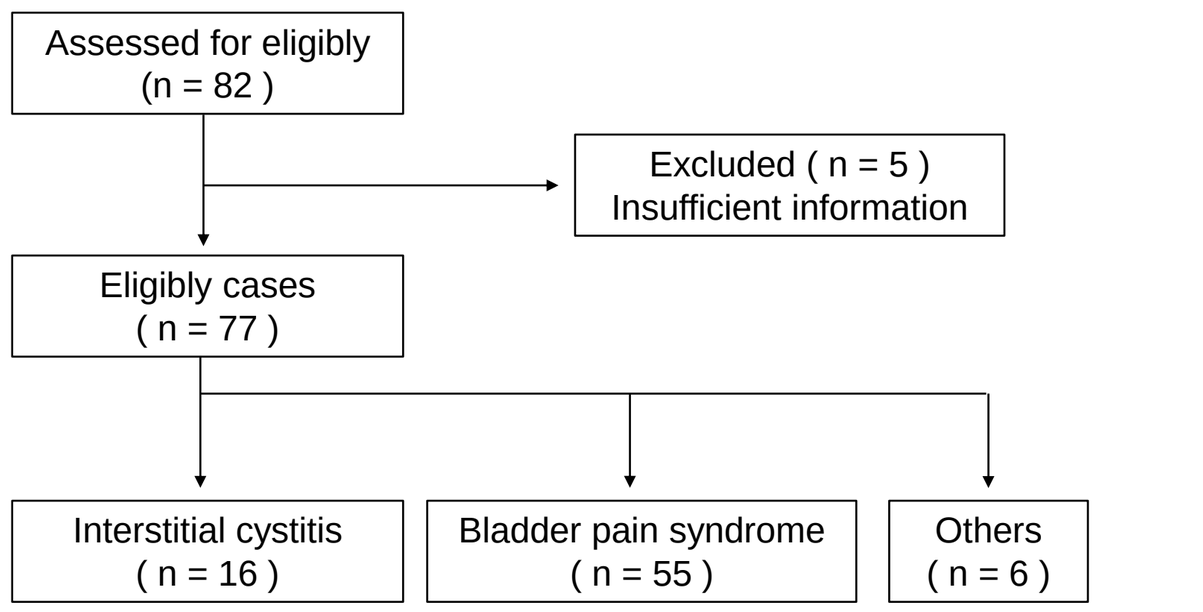
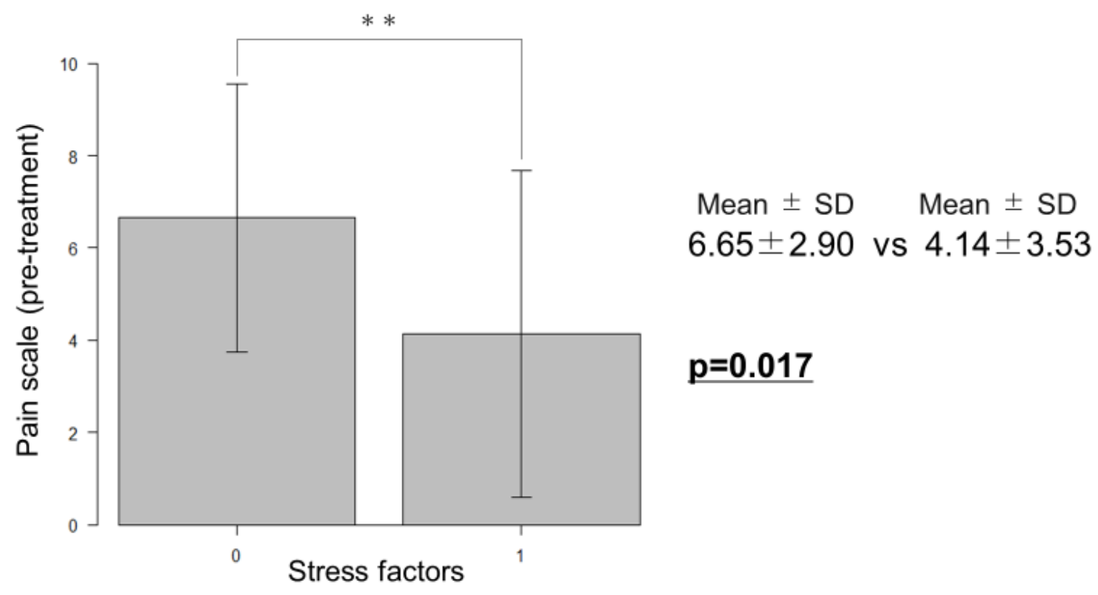


Figure 1. t-test results with stressors and bladder pain

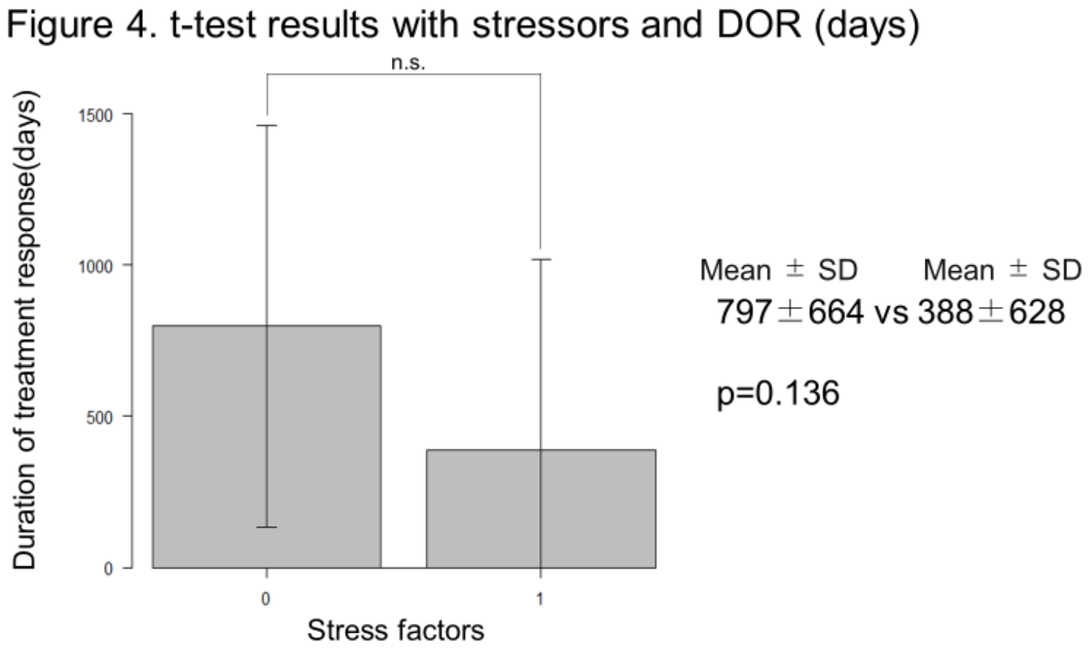


Patients with stressors showed significantly greater pain before the start of treatment than those without stressors.
(P-value: 0.017)

Figure 2. t-test results with stressors and the gap of pain severity

The gap of pain severity between before and after treatment was significantly higher in the group of patients with stressors.
(P-value: 0.033)

Figure 4. t-test results with stressors and DOR (days)



The duration of response also showed a predominant effect of treatment in the group with stressors.
(P-value: 0.136)

Figure 3. t-test results with stressors and Q1.Index of Problem

The difference between pre-treatment and post-treatment in OSPI question 1 (frequent urination) was significantly higher in the group of patients with stressors (P-value: 0.033)

References

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