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#### RELATIONSHIPS BETWEEN DAILY STRESS AND SYMPTOM EXACERBATION IN INTERSTITIAL CYSTITIS PATIENTS

**Aims of Study** Over 60% of interstitial cystitis (IC) patients report symptom exacerbation with stress but this relationship has not been empirically investigated. This study prospectively examined associations between daily stress and symptoms of pain, frequency, and urgency among IC patients and controls.

**Methods** 45 female IC patients (mean age, 55; range 29-81) recorded daily levels of urinary urgency, pain, daytime and nocturnal frequency, and stress for 4 weeks. 31 age-matched healthy controls kept a 1-week symptom diary.

**Results** Patients reported greater mean urinary frequency, urgency, and pain (all  $p < 0.01$ ) than controls. Moderate to severe pain and urgency was reported by over 30% of patients. 17.8% reported over 5 voids nightly. IC or health problems were the most consistent stressor for 13.3% of patients. Multiple regressions tested interactions of stress and group on symptoms. A significant interaction effect was observed for urgency ( $\beta = 0.30$ ,  $p < 0.001$ ) with follow-up correlations indicating that higher stress was related to greater urgency in patients ( $r = 0.64$ ,  $p < 0.001$ ) but not in controls. For patients, higher stress was related to greater pain ( $r = 0.60$ ,  $p < 0.001$ ). Due to the lack of variability in pain ratings in controls (almost 100% reported no pain), relationships between stress and pain could not be tested. Stress was not significantly related to daytime or nocturnal frequency among either patients or controls.

**Conclusions** Psychosocial stress appears to be related to aggravated pain and urgency in IC patients but not in healthy controls. Understanding physiological mechanisms underlying these relationships may shed light on sources of symptom exacerbation in IC.