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Amniotic Bladder Therapy in Patients with Interstitial Cystitis/ Bladder Pain Syndrome

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Amniotic Bladder Therapy in Patients with Interstitial Cystitis/Bladder Pain Syndrome

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Introduction and Objectives: Our study hypothesis postulates that if patients with Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS) bladders exhibit increased inflammation, fibrosis, and urothelial dysfunction, then treatment modalities that modulate inflammation and fibrosis, while promoting a regeneration may have a therapeutic effect in such patients. Amniotic membrane (AM) has been shown to foster a regenerative wound-healing environment. This study investigates the safety and efficacy of bladder injections of AM in patients with treatment resistant IC/BPS.

Methods: Fifteen consecutive treatment resistant IC/BPS patients (mean age 50.7 ± 14.4 years) with a median disease duration of 7 years (5-12 years) were included in the study. Under general anesthesia patients received intra-detrusor injections of reconstituted 100mg micronized AM and were followed for 24 weeks. Clinical evaluation and patient-reported outcome were assessed through several different scoring modalities.

Results: After amniotic bladder therapy (ABT), the lower urinary tract symptoms improved gradually up to 12 weeks in all patients. At 16 weeks, 3 patients experienced a resurgence of symptoms and requested another injection which resulted in improvement after 2, 4, and 8 weeks respectively. For the twelve patients who only received one injection, the symptoms were still significantly lower at 20 and 24 weeks compared to baseline. No safety concerns were noticed during the study.

Conclusions: Our findings suggest that ABT shows promise as a treatment for refractory IC/BPS patients. However, further study is needed to establish treatment protocol, better understand the mechanism of action and determine the durability of therapeutic response of ABT in IC/BPS.