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## Exploring the Effects of Amniotic Bladder Therapy on Female Sexual Dysfunction in Interstitial Cystitis/Bladder Pain Syndrome Patients

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## Exploring the Effects of Amniotic Bladder Therapy on Female Sexual Dysfunction in Interstitial Cystitis/Bladder Pain Syndrome Patients

Jonathan Lutchka, BS; Jack Vercocke, MD; David Pearlman, MD; Aron Liaw, MD; and Nivedita Dhar, MD.

### ABSTRACT

**Introduction and Objectives:** Female sexual dysfunction (FSD) is commonly associated with Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS). FSD manifests as abnormalities in sexual desire, arousal, orgasm, pain, distress, and satisfaction. Our primary objective was to assess the impact of micronized amniotic membrane injections (AM) on FSD and lower urinary tract symptoms using comprehensive measures, including the multi-domain Female Sexual Function Index (FSFI), the Pain Visual Analog Scale (VAS), and the Interstitial Cystitis Symptom Index (ICSI) and Interstitial Cystitis Problem Index (ICPI).

**Methods:** Study participants included patients diagnosed with IC/BPS and FSD refractory to traditional therapies. Under general anesthesia, these patients received intra-detrusor injections of reconstituted 100mg micronized AM. We collected data on ICSI, ICPI, FSFI, and VAS scores before the procedure and at 4, 8, 12, and 24 weeks post-injection. Our primary study endpoint was the impact of amniotic bladder therapy (ABT) on sexual function, with a parallel evaluation of injection safety.

**Results:** Eleven consecutive patients, with an average age of  $49 \pm 12$  years, demonstrated progressive improvements in their baseline IC/BPS symptoms over the 24-week study duration. These improvements were mirrored by enhanced FSFI scores, and reduced pain (VAS) related to intercourse over the 24-week study period. No adverse events were observed.

**Conclusions:** Our findings suggest that ABT holds promise for IC/BPS patients, particularly females with refractory FSD symptoms. However, further research is imperative to deepen our understanding of the mechanisms through which ABT effectively addresses these complex disorders. Additionally, the long-term durability of this treatment response warrants investigation.

Figure 1: Average ICSI and ICPI scores per question before and after ABT

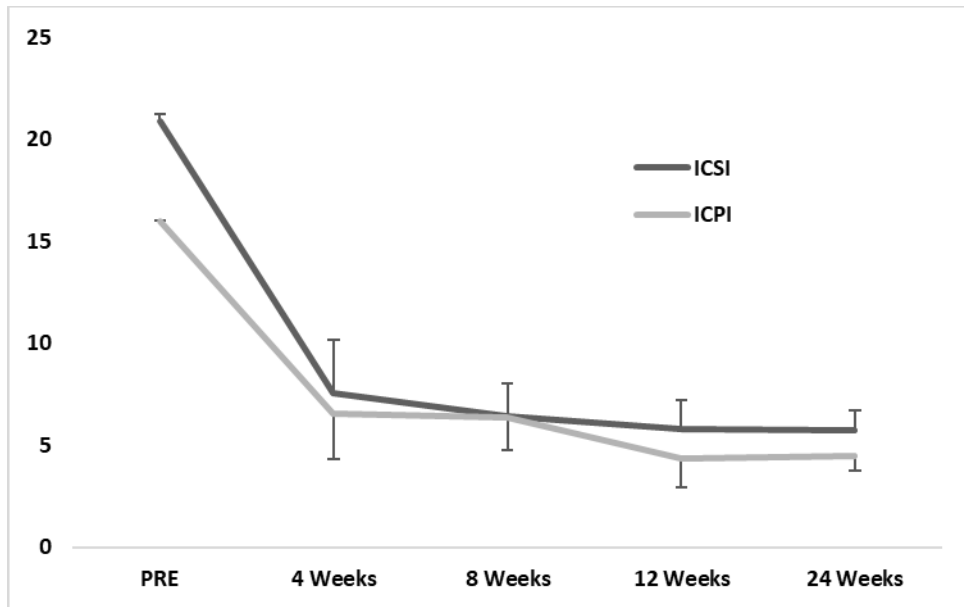


Table 1: Average FSFI scores and VAS scores ( $\pm$  standard deviation) before and after ABT

	pre	4 weeks	8 weeks	12 weeks	24 weeks
Desire	3.3 (0.6)	4.4 (0.7)	4.6 (0.6)	4.6 (0.5)	4.4 (0.4)
Arousal	3.8 (0.7)	4.7 (1.1)	4.6 (1.0)	4.7 (1.1)	4.5 (1.0)
Lubrication	3.9 (0.6)	4.1 (0.9)	4.1 (1.0)	4.2 (1.1)	4.0 (0.9)
Orgasm	3.2 (0.7)	4.2 (1.3)	4.4 (1.4)	4.5 (1.2)	4.1 (1.1)
Pain	3.1 (0.4)	4.6 (1.2)	4.8 (1.5)	4.9 (1.5)	4.4 (1.0)
Satisfaction	3.9 (0.6)	4.5 (0.9)	4.8 (1.2)	4.9 (1.5)	4.5 (1.1)
Total FSFI	21.2 (6.5)	26.5 (5.4)	27.3 (6.2)	27.8 (6.8)	25.9 (5.8)
VAS	8.4 (0.9)	7.1 (0.8)	6.7 (1.0)	6.3 (1.2)	6.0 (0.9)