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### Fractional Carbon Dioxide Vaginal Laser for the Treatment of Urinary Symptoms: Preliminary Short-Term Results

Annah Vollstedt

Lauren Tennyson

Michael Rezaee

Ly Hoang Roberts

Larry Sirls

*See next page for additional authors*

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**Authors**

Annah Vollstedt, Lauren Tennyson, Michael Rezaee, Ly Hoang Roberts, Larry Sirls, Priya Padmanabhan,  
and Kenneth M. Peters

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**Poster #66**  
**WITHDRAWN**

**Poster #67**

**FRACTIONAL CARBON DIOXIDE VAGINAL LASER FOR THE TREATMENT OF URINARY SYMPTOMS: PRELIMINARY SHORT-TERM RESULTS**

Annah Vollstedt<sup>1</sup>, Lauren Tennyson<sup>1</sup>, Michael Rezaee<sup>2</sup>, Ly Hoang<sup>1</sup>, Larry Sirls<sup>1</sup>, Priya Padmanabhan<sup>1</sup>, Kenneth Peters<sup>1</sup>

<sup>1</sup>Beaumont Hospital, <sup>2</sup>Dartmouth-Hitchcock Medical Center

Presented By: Annah Vollstedt, MD

**Introduction:** It has been proposed that fractional carbon dioxide (fCO<sub>2</sub>) vaginal laser can also treat stress urinary incontinence (SUI) by increasing collagen production. The aim of our study was to evaluate the effect of vaginal fCO<sub>2</sub> laser therapy in patients complaining of SUI.

**Methods:** This is a prospective, open-label study of women over 18 years old with complaints of urogenital symptoms. Women with a history of vaginal estrogen use within the last 3 months were excluded. Participants received 3 laser treatments 6 weeks apart. Cough stress test (CST) was performed at each visit. Incontinence-Quality of Life (I-QOL), Questionnaire for Urinary Incontinence Diagnosis (QUID), Female Sexual Function Index (FSFI), and Patient Global Impression of Improvement (PGI-I) were collected. ANOVA analysis was used.

**Results:** Fifty-eight participants were enrolled. Analysis was performed on the 30 participants who complained of SUI and had undergone three treatments. Baseline CST was positive in 20% (6/30). CST was positive in 16.7% at 6-months (2/12). No difference was seen in total FSFI, I-QOL, or QUID scores at 6-months. The mean PGI-I showed increased improvement after each treatment and at 6-months (p<0.01), **Table 1**.

**Conclusion:** Preliminary results show no objective or subjective improvement in SUI. Patients reported global improvement. Further data are needed to confirm these early findings.

Table 1. Survey Data at Each Treatment and at 6-month Follow-up

Survey	T1 Score (SD)	T2 Score (SD)	T3 Score (SD)	6-months follow-up score (SD)	p value
FSFI total	16.5 (9.8)	17.6 (11.1)	16.5 (10.9)	15.4 (10.5)	0.62
I-QOL	56.4 (27.6)	63.4 (26.3)	68.8 (23.9)	72.5 (24.6)	0.14
QUID-Urge	7.5 (4.1)	6.6 (3.7)	6.3 (3.7)	4.5 (3.1)	0.06
QUID-Stress	8.6 (4.6)	7.9 (3.8)	7.2 (4.6)	6.4 (4.3)	0.31
QUID-Total	16.1 (7.2)	14.5 (6.3)	13.3 (6.9)	10.9 (5.6)	0.06
PGI-I	N/A	3.4 (0.7)	2.9 (0.9)	2.7 (0.8)	<0.01

FSFI: higher score correlates to worse sexual function

I-QOL: higher score correlates to higher quality of life

QUID: higher score correlated to worse urinary incontinence

PGI-I: 1 = very much better, 2 = much better, 3 = a little bit better, 4 = no change, 5 = a little worse, 6 = much worse, 7 = very much worse

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