Laser Treatment of Higher Grade Cystocele

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SUMMARY

Many women suffer from various types of pelvic organ prolapses, among which the most common is the bladder prolapse or cystocele. Higher-grades of cystocele from II-IV, in which the anterior vaginal wall reaches or protrudes outside of the vulva, are especially disturbing and greatly diminish the patient's quality of life.

Recently, a new minimally invasive laser technique was proposed for reduction of prolapses. This technique exploits the photo-thermal effect of a laser beam on mucosa tissue in order to cause its shrinkage without the removal of tissue. The overall impact and burden on the patient's organism is minimal, as opposed to more invasive classical and other laser surgical procedures.

The objective of this study is to evaluate a new minimally invasive, non-ablative Er:YAG laser technique for prolapse reduction. 28 patients with an average age of 56.1 years and average BMI 25.1 were included in the study. Before the treatment, the cystocele stages were evaluated according to the Baden-Walker scale. A Fotona SP Spectro laser system was used and the treatments were performed with the 2940 nm Er:YAG wavelength utilizing SMOOTH mode combined with VLP mode. Patients received one to three treatments with 2-month intervals between the sessions. Treatment discomfort was measured at each session with the 10 point VAS pain scale. Follow-ups were performed at 2, 4 and 6 months after the treatment.

All patients but one (96.4%) improved their cystoceles by one to three grades. The majority of them (13 or 46.4%) improved by one grade, 12 (42.9%) by two grades, while 2 patients (7.1%) even improved by three grades. Treatment discomfort was minimal, with an average score of 0.44 on the 10 point VAS scale.

Fig.1: Average grade of treated cystoceles before and after the Er:YAG laser treatment.

This pilot study of a new non-invasive Er:YAG laser treatment for higher-grade cystocele demonstrated good efficacy in improvement of the cystocele, with minimal patient discomfort during the treatment and no adverse effects.