

Erbium Laser Treatment for Episiotomy Scars - 12 Months Follow-up

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Episiotomies are surgical incisions made in the perineum to facilitate vaginal births and enable easier repair and quicker post-partem recovery. However, episiotomies frequently have adverse effects like: infections, increased pain and bleeding, prolonged healing times, scarring, and increased discomfort once sexual intercourse is resumed. A few years ago laser therapy was offered as a minimally invasive treatment option, and the purpose of this study was to evaluate the efficacy and safety of Erbium laser treatment for the range of symptoms connected with episiotomy scars.

In this study patients with episiotomy scars complaining of pain while sitting, pain at pressure, painful intercourse, pulling, bumps at the perineum and bleeding after intercourse were treated with ablative Er:YAG laser using a two-step protocol: full spot (2 mm) cold ablation along the scar with 300 mJ and 0.1 msec pulses, followed by fractional beam (5 mm spot, 800 mJ and 0.6 msec) across the whole episiotomy surface with 2 cm margins. Three sessions were performed with one-month intervals. The patients' subjective assessments of improvement were measured with a 10-point numerical scale. Treatment discomfort was measured with VAS (0-10). Follow-ups were performed at each visit and at 3 months post laser treatment. Adverse events were registered at every follow-up.

41 patients were included in this study. The average age was 39.1 yrs (24-51) gravidity 2.1 (1-4) and parity 1.9 (1-3). 30 patients (75%) suffered from more than one of the six observed symptoms.

After the first session, 27 patients (66%) claimed improvement, after the second all patients (100%) claimed improvement, 24 (58%) were free of any complaints and after the third session 34 (83%) were without complaints. The average improvement scores after the sessions were 3.5, 8.1 and 9.8. A total of 82.5% of patients assessed the improvement as 10/10 after the third session. The average pain during the procedure (without anesthesia) was 6.5/10. All reported adverse effects were mild and transient.

Erbium laser treatment showed efficacy in

improvement of symptoms connected with episiotomy scars with no major adverse effects noted. Patients tolerated the treatment well and their satisfaction was very high.

Effects of Sub-ablative Long-pulse Er:YAG Laser Irradiation on Recurrent Vaginal Candidiasis – Preliminary Results

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The purpose of this research was to evaluate the effects of sub-ablative long-pulse Erbium laser in women suffering from recurrent vaginal candidiasis.

C. albicans is an opportunistic organism that may cause different health problems in human beings ranging from superficial infections to life-threatening invasive candidiasis. The incidence of recurrent vaginal candidiasis is on the rise in our daily practice due to many associated risk factors such as: stress with adrenal fatigue, poor nutrition with immunodeficiency conditions, and contraceptive pills with estrogen dominance, among other conditions.

20 women suffering from recurrent candidiasis received three vaginal laser sessions with 2.25 J/cm² stacking 7 shots in the same area every 2.5 mm along the entire length of the vagina using a glass probe with a 360 ° vaginal extension to deliver the energy into the vaginal canal. The patients were treated every 2 weeks.

Statistically significant effects were observed in all patients treated, not only in recurrent symptoms, but also in their evolution. These clinical outcomes were in accordance with their vaginal cultures, which remained negative during the 12 months of follow up.

Sub-ablative long-pulse Erbium laser (SALPEL) can be proposed as a treatment option for this type of patient, significantly reducing the pathogenicity of *C. albicans*. It can also be concluded that SALPEL could be a possible promising treatment for superficial mucocutaneous *C. albicans* infections.