Treatment of Vulvar Leukoplakia with Er:YAG Laser

Ivan Peev¹, Silvia Orucheva², Ibryam Ibryam³

- 1. Aestheline Dermatology and Laser Aesthetics Clinic –
 Department of Dermatology
- 2. Aestheline Dermatology and Laser Aesthetics Clinic —
 Department of Gynecology
- Aleksandrovska Hospital "Maichin Dom" Department of Pathological Obstetrics and Gynecology

We present the case of a 47-year-old Caucasian woman with a one-year history of whitish plaque on both labia majora, which started with a small area of the outer part and slowly progressed to affect the entire labials. She complained of a regular itch. The patient had been in menopause for two years, and had experienced two labors. In 2009 and 2013 she had undergone two operations for endometriosis. In November 2018 she had a colposcopy with biopsy, which revealed leukoplakia with chronic inflammation. She underwent therapy with topical hormones and imiquimod 5% without therapeutic benefit. The patient was referred to our clinic for a laser treatment.

An Er:YAG laser treatment (Fotona SP Dynamis) was initiated for vulvar leukoplakia. The procedure was performed under local infiltrative anesthesia. Laser peeling was performed with an R11 handpiece. After the treatment, a dressing with iodine was applied for 3 days. The patient was advised to use epithelization spray with hyaluronic acid and aseptic baths. The downtime period after the treatment continued for approximately 2 weeks.

On the follow-up visit (4 weeks later) the patient was feeling well, without symptoms of the disease. The mucosa of the labials was pinkish. The patients did not complain of itching.

The use of laser in the treatment of vulvar leukoplakia is recent and only a few studies have used the CO² laser with good response and low recurrence rate. None have used the 2,940 Er:YAG laser, which is characterized by limited thermal damage, the possibility of multiple passes through the tissues with complete light absorption and an ablation value similar to that achieved with CO² laser. Clinically, it results in shorter post-operative healing time, reduced redness and swelling, and accelerated reepithelization. Our findings suggest that treatment with Er:YAG might be a better alternative to CO² laser therapy.

Er:YAG Laser Treatment of Chronic Resistant Prostatitis

Heba Kotb¹, Zdenko Vižintin²

¹ Simply Happy Clinic and Academy, Cairo, Egypt ² Fotona, Ljubljana, Slovenia

This study was designed to assess the effectiveness of erbium laser in the treatment of chronic prostatitis through enhancing the prostatic circulation, especially with cases resistant to medical treatment.

The study was conducted in the private sector after obtaining the consent of the contributing patients. 42 patients were treated by 3 transrectal erbium laser sessions, 1 week apart.

The amount of pulses delivered depended on the degree of prostatic hardness assessed by clinical examination.

An investigatory prostatic ultrasound test was done before and after the treatment session for each patient with 5 parameters measured as comparative criteria; volume, shape, symmetry, consistency/smoothness, intra-prostatic circulation.

Patients with prostatic tumors and lumps were excluded and referred to a urologist.

- a) circulation was markedly improved in 100% of cases (42 patients)
- b) volume decreased significantly in 95.23% of cases (40 patients)
- c) smoothness of the prostatic surface was regained in 85.71% of cases (36 patients)
- d) shape and symmetry were improved in 42.85% of cases (18 patients)
- e) monthly follow-up of the patients is still going on and intended to go on for 1 year post treatment to assess consistency/relapses.

The non-ablative SMOOTH Erbium laser is extremely effective in the treatment of chronic prostatitis. It is also effective in cases which have resisted medical treatment.

Follow up of the patients is mandatory to assess the duration of the effect of the treatment.