

Is vaginal fractional CO<sub>2</sub> laser treatment effective in improving overactive bladder symptoms in post-menopausal patients?

Preliminary results



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# **Abstract**

# **Objective**

To evaluate the role of vaginal fractional  ${\rm CO_2}$  laser treatment in the relief of Overactive Bladder (OAB) symptoms in post-menopausal women.

### **Patients and Methods**

Post-menopausal women who complained of one or more symptoms related to vulvo-vaginal atrophy (VVA), who experienced symptoms of OAB and who underwent vaginal treatment with fractional  $\rm CO_2$  laser were enrolled in the study. At baseline (T0) and 30 days post-treatment T1), vaginal status (using Vaginal Health Index - VHI), subjective intensity of VVA symptoms (using a visual analog scale - VAS) and micturition diary were evaluated. OAB symptoms were also assessed using a validated questionnaire.

#### **Results**

Thirty patients were enrolled. A statistically significant improvement in VVA symptoms was observed and in VHI at T1 (p < 0.0001). A significant improvement was also identified in the micturition diary, in number of urge episodes and OAB-q (p < 0.0001). Nine of the 30 patients suffered from incontinence episodes and had improved at T1.

### **Conclusions**

We showed that fractionated  ${\rm CO_2}$  laser vaginal treatment has proved to be effective in improving OAB symptoms in post-menopausal women. Moreover, it is a safe and efficacious measure for the relief of VVA related conditions. Further long-term studies are needed to confirm these preliminary results.