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## Postpartum perineal pain: may the vaginal treatment with CO<sub>2</sub> laser play a key-role in this challenging issue?

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### Abstract

#### Purpose

Pregnancy and childbirth, despite being physiological events, represent a very delicate period in a woman's life, because they expose to important vulvo-perineal traumas. The pelvic pain that follows each delivery, whether spontaneous or surgical (caesarean section), does not end in the first days after birth but, depending on the studies, becomes persistent in a very variable percentage of cases. Therefore, in the present pilot study, we aimed, for the first time in literature, to assess the efficacy of CO<sub>2</sub> laser in women affected by perineal postpartum symptoms.

#### Materials and Methods

Between February 2013 and June 2018, all women with late postpartum pelvic pain referred to the Department of Obstetrics and Gynecology of San Marino Hospital, were recruited and treated using the CO<sub>2</sub> laser for three applications every 4-6 weeks.

#### Results

Between February 2013 and June 2018, according to the inclusion and exclusion criteria, 32 women with late postpartum pelvic pain were recruited in our protocol study. Mean age of patients was 34.1 years. At latest follow-up, our data demonstrated an improvement in symptoms (dyspareunia, pain at introitus, vaginal dryness, itching and vaginal burning) with a mean reduction of this symptom of 70% from baseline.

#### Conclusions

This study has shown the effectiveness of CO<sub>2</sub> laser treatment in postpartum perineal pain. Nevertheless, our results should be considered promising but preliminary. In fact, they need to be tested in larger cohort of patients to confirm its application in clinical practice and to evaluate the long-term duration of this treatment.