



**BAHAREH ARBABI**

Askarie hospital  
Iran

### The effect of DBD plasma therapy on wound healing after labiaplasty

#### Abstract:

**Background:** It is important for a surgeon to control complications such as redness, swelling, itching, discharge and especially dehiscence after labiaplasty. DBD (dielectric barrier discharge) plasma therapy, which can be a less complicated and safe method in controlling skin complications and accelerating wound healing, was used in the present study for patients underwent labiaplasty and its effect on the mentioned complications was investigated.

**Methods:** In this quasi experimental study, 40 patients aged 30-40 who had undergone trim labiaplasty surgery were recruited. None of them had medical history, smoking, or medication. DBD plasma therapy was performed on days 3, 7 and 10 after the surgery. Each session lasted for 10 minutes. The operation site was assessed for redness, secretion and itching on days 7 and 14, and the wound was reassessing for dehiscence until day 21. Results: Following the DBD plasma therapy that started on the 3rd day after the labiaplasty and was repeated on the 7th and 10th days, the wound assessment on the 7th day showed that 2.5% of the women's wounds had high level of secretions, 20% had moderate level of secretions, and 77% had low secretion, while on the 14th day, these values reached zero, 5% and 95%, respectively; and these changes were statistically significant ( $P < 0.05$ ). The redness of the wounds decreased from 5% among cases on the 7th day to zero on the 14th day ( $P < 0.001$ ), and also the itching of the wounds decreased from 30% of the participants to 7.5% of them on 14th day after the surgery ( $P < 0.01$ ). The other important finding was that no case of dehiscence was observed in any wound during the study, even up to day 21.

**Conclusion:** Considering the results of this study, DBD plasma therapy can help the surgeon to control post-operative wound complications, provide women's health and subsequently improve their satisfaction with the changes made. Therefore, the use of DBD after surgery can make labiaplasty the satisfactory experience for both the surgeon and the patient.

#### Biography

**Dr. Bahareh Arbabi**, a dedicated OBGYN and board-certified cosmetic gynecologist from Iran, has been making waves in her field for over a decade. With a remarkable record of 3000+ deliveries and 800 successful cosmetic gynecology surgeries, she stands as a shining star in the world of women's health. Dr. Bahareh has earned prestigious Fellowship in Stem Cell and Regenerative Medicine from IASRM India and Fellowship in Cosmetic Gynecology from ABCG. She is also a faculty member in a Cosmetic Gynecology course in Dubai, showcasing her dedication to education. Dr. Bahareh has graced stages around the globe, sharing her expertise at events like the ISRAM World Congress 2023 in India, Aptos Company event Georgia, ESAG London, and the IMCAS World Congress Paris 2024. Her influence extends to her membership in ISSM (Sexual Medicine) in Dubai. In her homeland, Dr. Arbabi serves as the Head of the Cosmetic Gynecology Department and holds the esteemed position of a university professor at the University of Medicine in Isfahan city. Her commitment to education is evident through her collaboration with headmasters in Tehran, where she has conducted over 50 workshops on cosmetic surgeries in gynecology.