
Brief report

Capacitive-Resistive Monopolar Radiofrequency at 448 kHz as Coadjuvant Treatment in Plastic Surgery

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Short Title: CRMRF in Plastic Surgery

Abstract

Radiofrequency is widely used in the clinical practice thanks to the physiological effects of therapeutic heat on pain relief, reduction of inflammation and edema, and tissue regeneration. Capacitive-resistive monopolar radiofrequency (CRMRF) at 448 kHz has proven to have effects applied as diathermal and subthermal power. Work subthermally allows to focus on acute processes immediately after surgery, where hyperemia is contraindicated, and no other radiofrequency can be applied. The study focuses on the effect of applying 448 kHz as a coadjuvant treatment in plastic surgery, both before and after surgery, and the results have shown that, when applied before surgery, particularly in patients with risk factors, it prepares tissues by ensuring their oxygenation and accelerating recovery, reduces postoperative time, and obtains better results. When applied after surgery, it has the same effects aside from reducing tissue inflammation and hematomas and resolving fluid retention, which favors lymphatic drainage without pressotherapy. CRMRF applied as a coadjuvant treatment of plastic surgery is a safe, painless, and well-accepted treatment for patients, which reduces the time of surgery by 20%-30% in patients with fibrosis and the time of recovery by 40%-50%. It obtains better results, reduces costs, and patients can see the results of surgical treatments sooner.

Keywords: capacitive-resistive monopolar radiofrequency, subthermia, edema, inflammation, hematoma, plastic surgery

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