

Radiofrequency Surgery as Refinement in Aesthetic Surgery

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There is a need for absolutely precise incisions in many locations of Aesthetic Surgeries. Very important is the possibility to have dry lines without bleeding and to avoid the pressure with the blade onto the skin to be able to divide it "by touch". Both of these prerequisites are fulfilled with Radiofrequency of 4 MHz. It is useful if the same device is able to provide the coagulation of blood vessels.

Ellman International Inc. of New York markets radio wave tools and has effectively redefined the relevance of radio surgery, particularly its use in cosmetic surgery. Ever more plastic surgeons consider operating without high frequency radio waves unthinkable. For the experienced operating surgeon, its advantage over all the alternative methods such as scalpel, laser or electro surgery is indisputable.

Reduced heat production gives faster healing and lower post-operative discomfort. The aesthetic surgeon is able to make an incision precisely, without applying pressure or the tissue being pulled; much in the way an artist wields an ink pen while drawing. The radio wave incision simultaneously improves haemostasis and is antibacterial. Histological tissue samples are not distorted by artefacts, as is the case for electro surgery and laser surgery. Scar formation is optimal and superior to all other procedures (scalpel, laser, ...).

We use this high tech tool by: Blepharoplasties, Facelifts, direct excisions in facial surgery, nostrils and lip commissures, neck incisions, incisions around the nipple-areola-complex and around the navel (to change its form), augmentative phalloplasty and in all locations where we need the high level precision.

Radio surgery is used predominantly in aesthetic facial surgery, where surgical techniques cannot be applied with the same degree of precision nor are they as straightforward as radio wave surgery. When making an incision, the skin is simply touched by the electrode, it is 100% precise and there is no tissue warping. The instrument's hand piece is similar to a pen holder. Surgical operation with lasers is in contrast complicated, imprecise and associated with prolonged wound healing due to denaturation of the wound edges from extreme heat effects, which is an unsatisfactory compromise for the advantage of minimising intra-surgical bleeding. In contrast to radio waves, the scalpel cuts under application of pressure and pulling, which is an imprecise incision technique for soft tissue such as eyelid skin, neither does the scalpel give simultaneous arrest of bleeding.

Other operations such as rhinophyma treatment, endoscopic brow lift, hair transplant, tumour removal, etc. will benefit from 4.0 MHz radio surgery, as would many major surgical interventions such as breast surgery, dermolipectomy, abdominal plastic surgery, vein surgery, etc. Special issue is the reduction of scars. Sometimes we are able to make certain scars even invisible.

A diversity of indications providing an extensive backlog of clinical cases, make day-to-day surgery unimaginable without radio surgery. The benefit to cosmetic surgery of radio surgery lies in its superior results and ease of method, establishing it as a valuable aid. Although work with radio waves requires operative skill and most importantly a steady hand, any surgeon new to this technique need not fear lengthy training or an extended learning curve. Like other high-tech tools, the radio surgery enables us to achieve detail improvement of our surgeries and softer scarring.

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