

Radiofrequency in Aesthetics

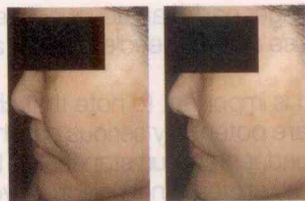
Radiofrequency appears to be the latest buzz-word in aesthetic treatments, from doctors' clinics to beautician outlets. What exactly is it, and what does it do?

Radiofrequency (RF) treatment refers to the deliberate conduction of a high frequency electric current (RF current) into the skin to generate heating of deeper tissue, such as collagen in the dermis, while the surface skin or epidermis is protected by cooling devices. According to Dr Wong Su-Ni, Consultant Dermatologist at Pacific Specialist Practice, heating of collagen (a protein in the skin that serves an important function as scaffolding for the skin and "plumps up" the skin) leads to damage and immediate contraction or tightening of collagen.

"A wound-healing or remodelling response occurs gradually over four to six months, where collagen-producing cells in the skin are stimulated to increase production of new collagen to replace the damaged collagen, resulting in firmer skin tone, improvement in wrinkles and shallow acne scars, and a more youthful appearance," says Dr Wong.

"RF tends to travel through tissue with the least resistance (known as impedance) to it, such as blood and water (found in skin cells), heating up tissue along the way. When RF meets tissue that has high impedance, such as fat cells in the fat layer, it travels through the path of least resistance – through fibrous strands that provide scaffolding for the fat layer, causing tightening of these strands, which then pull the fat layer inwards, resulting in tightening and contouring of the area treated," adds Dr Wong.

RF, on its own, is used to tighten and contour areas that have developed wrinkling and sagging due to effects of age and gravity, such as sagging jowls, sagging cheeks associated with folds on either side of the mouth, eye bags, and fullness under the chin. It is also effective for slimming purposes.



Before After

Also called the "Fever Therapy" the Inbio 550 enables radio frequency wave of 0.3 MHz to flow through body to tremendously increase blood flow and cell metabolism, leading to increase in internal temperature to between 39°C to 42°C. "The technology can reach as much as 4cm depth inside the body tissue to effectively burn fat and breakdown stubborn cellulite," says According to Jennifer Lim, Marketing Director of Aquest.

"The technology uses multiple active plates attached to electrodes. During the treatment, the therapist glides the plate up and down continuously on the body with massaging strokes as if using an iron to "iron out" the lumpy cellulite and body fat. However, you do not feel hot but you feel a warm sensation that is pleasant and relaxing. Although some people notice positive result in one treatment, most people achieve substantial fat reduction after 12 treatments within 3-4 weeks and a small percentage might need 2 months. After completion of a treatment course, the improvement continues over 3-4 months. Patience and determination is necessary to achieve long-lasting healthy weight loss and desirable skin improvement," says Lim.

"The logic behind the technology is simple. When we have fever and our body temperature rises to more than 39°C, the fat content inside adipocyte cells is decomposed. Hence, many people encounter a substantial reduction in their body weight after a period of high fever," adds Lim.

Apart from slimming down an overweight person, radio frequency stimulates lymphatic system and promotes detoxification and immunity, thus resulting in dermo-aesthetic benefits such as skin hydration, acne and pimple management and anti-ageing.

