

# Skin tightening with bipolar radiofrequency system



Before



2 Months After 1 Treatment.

Courtesy of Dr Elena Romanova, MD.

Photos are unretouched. Individual results may vary.

**S**kin tightening procedures occupy an important place in the practice of aesthetic medicine. Physicians have a big choice of energy-based devices (EBD) and sometimes it is difficult to find the right one.

## Profound

Personally, I prefer to use Profound which is a bipolar radiofrequency system delivering energy via 30G needles to the reticular dermis with the dermal cartridge and to the subcutaneous fat with the Sub-Q cartridge. The microneedles measure the temperature of target tissue 10 times per second therefore allowing the maintenance of the same temperature all through the treatment time, usually lasting for three or four seconds. Why is it important to maintain a temperature of 67-68°C for this length of time? We know from the literature that the partially denaturated collagen is an important trigger in the synthesis of the new collagen formation. This partially denaturated collagen is obtained when the collagen is kept at 67-68°C for three to four seconds. Histological studies have proven that Profound shows an increase of not only collagen, but also elastin and hyaluronic acid post treatment. The result being increased dermal volume, reduction of wrinkles and well hydrated tissue, resulting in younger looking skin.

## Patient selection

The best patients for the facial treatment have normal or slightly thicker skin with a degree of laxity, reduced jaw line definition and with or without jugular wrinkles. I avoid patients with a thin skin.

## Preparation

I always work with two types of anaesthesia. After taking pictures and cleaning the face, the 30% lidocaine cream is applied on the treated areas of skin for 30 minutes. Then the cream is removed and the skin is disinfected. Before disinfection I draw horizontal lines to follow the cartridge movements. The second step of anaesthesia consists of infiltration of skin by 65ml of anaesthesia solution comprising 10ml of lidocaine 2%, 0.2ml of adrenalin 0.1mg/ml, 5ml of bicarbonate 1.4% and 50ml of saline solution. I use a triple injector with 4mm and 30G needles for this step of anaesthesia.

## Treatment

Depending on skin thickness I programme the treatment temperature for dermal cartridge at 67 or 68° for three to four seconds and space the insertions at 3mm intervals within the treatment area. When I treat with both cartridges, I use the Sub-Q cartridge first for the submental area with the 68°C for four seconds programme followed by treatment with the dermal cartridge for the face and submental area.

I do not treat the forehead, the upper lip and the chin with Profound. If necessary, I combine the treatment with fractional CO<sub>2</sub> laser all over the face or for a specific area.

## Aftercare

At the end of treatment, I clean the skin and apply Cicaplast Baume B5 balm or Cicabio repair cream and cool the area to reduce the oedema. I advise patients to use cold packs two to three times a day and to sleep in the semi-recumbent position to decrease swelling. During the first 10 days, post-procedure patients come to the clinic four times for a session of LED light therapy.

I take photographs at one, three and six month intervals after the treatment.

## AUTHOR



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#### Declaration of competing interests:

The author has received fees from Candela Medical for speaking at and organising educational lectures.