What is New
Skin Tightening?

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Disclosure

- Research Grants: Syneron, InMode, Alma
- Advisory Roles: Endymed, BTL
Technologies

- Lasers (laser lipolysis)
- Light sources
- Focused Ultrasound (Ulthera, Liposonix and Ultrashape)
- Cryolipolysis (Coolsculpting)
- Radiofrequency
Facial
Off-Facial
Cellulite
Body Shaping
Radiofrequency Options

- Monopolar
- Bipolar
- Multisource
- Unipolar (near- microwave source)
RF

- Monopolar (Solta Thermage, BTL Exelis, (ThermiAesthehetics))
- Bipolar (InMode, Apollo, Velashape, and Viora)
- Unisource (Endymed)
Radiofrequency Options

- Monopolar
- Bipolar
- Multisource
- Unipolar (near-microwave source)
Types of RF

- Monopolar (Solta Thermage and BTL Exelis)
Monopolar RF

- Monopolar systems deliver current by using one electrode that contacts the skin and another that acts as a grounding pad.

- The skin tightening effect is based on the principle of volumetric heating. The electrode contacting the skin delivers the electric current to the skin. A reverse thermal gradient is created by cooling of the epidermis.
Monopolar RF

- The dermis is then heated uniformly and volumetrically, sparing the epidermis. Partial collagen denaturation occurs as a result of this heating, which leads to collagen contraction and thickening.

- Some contraction of the collagen framework may occur immediately due to the fibril denaturation. More tightening follows due to a natural inflammatory wound healing response that triggers neocollagenesis and further skin contraction.
Monopolar Variation

- ThermiRF (ThermiAesthetics)
Bipolar

- Monopolar RF has one active electrode on the skin and a grounding pad
- Bipolar RF has 2 actives electrodes placed short distance apart
Bipolar

- Current flows between the 2 electrodes
- More superficial penetration when compared to both monopolar RF
Clinical Results

- Bipolar RF used for superficial skin tightening
Fractional Bipolar Radiofrequency
“Designer Dermis”

- Match treatment to the patient’s goals
- Superficial pigmentation and rhytides, use the 126 pin tip (epidermis and superficial dermis)
- Medium depth wrinkles and texture, use the 60 pin tip (mid dermis)
- Deep acne scars, deep wrinkles with moderate laxity, use the 3mm tip (deep dermis)
- Loose/saggy skin use the 3mm coated tip (deep volumetric heating)
Multisource Radiofrequency

- Endymed
- 8 distinct generators instead of one typical 1 generator
- Superficial and deep tightening.
Facial

Off-Facial

Cellulite

Body Shaping
- Facial
- Off-Facial
- Cellulite
- Body Shaping
Types of RF

- Monopolar
- Unipolar
- Multisource
- Microneedle Fractional Bipolar
Types of RF

- Unipolar
Types of RF

- Unipolar (Alma Accent VShape)
Unipolar

- No electric current to the skin
- High frequency EMR at 40MHz to induce rotational oscillations in water molecules
- Action akin to microwave energy
- Production of heat to depth of 15-20mm
Clinical Results

- Unipolar devices used for cellulite and skin tightening
Unipolar diffuse RF
Goldberg et al
Dermatologic Surgery 2008

- 30 Female Subjects
- 6 treatments over 12 weeks
- Upper Thigh Cellulite
Multineedle Fractional

- Syneron ePrime (Bipolar)
- Lutronic Infini (Bipolar)
- Endymed Intensif (Multisource)
- Facial
- Off-Facial
- Cellulite
- Body Shaping
Body Shaping-Apoptosis

- Radiofrequency (BTL Vanquish)
- Radiofrequency (InMode BodyFX)
Body Shaping

- Radiofrequency (BTL Vanquish)
What is New
Cosmetic Radiofrequency?

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