

PUBLICATION INFORMATION

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- The Renuvion® APR Handpiece is intended for the delivery of radiofrequency energy and/or helium plasma for cutting, coagulation, and ablation of soft tissue during open surgical procedures.
- The Renuvion® APR Handpiece is indicated for use in subcutaneous dermatological and aesthetic procedures to improve the appearance of lax (loose) skin in the neck and submental region.
- The Renuvion® APR Handpiece is intended to be used with compatible electrosurgical generators owned by Apyx Medical (specifically BVX-200H, BVX-200P, APYX-200H, APYX-200P, APYX-RS3, and APYX-JS3).
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As with any procedure, individual results may vary. As with all energy devices there are inherent risks associated with its use, refer to the IFU for further information.

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ADVANCES IN COSMETIC SURGERY

Advances in Skin Tightening with Liposculpture



Plasma Technology Versus Radiofrequency

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KEYWORDS

• Liposculpture • Liposuction • Skin tightening • Radiofrequency • Plasma • BodyTite • Renuvion

KEY POINTS

- The term, *liposculpture*, is used to describe a procedure that includes both fat reduction and skin tightening.
- Skin tightening involves both skin retraction at surgery and skin tightening with neocollagenesis in the long term.
- The Renuvion/J-Plasma system produces skin retraction and tightening by 2 mechanisms, radiofrequency and ionized helium (plasma).
- The BodyTite system uses radiofrequency energy for soft tissue tightening by immediate and long-term thermal contraction of the fibroseptal network in the subcutaneous space and nonablative, inflammatory heating of the dermis.



Video content accompanies this article at <http://www.advancesincosmeticsurgery.com>.

Since the latter half of the twentieth century, there has been an increasing focus on the body as a vehicle for identity and self-expression, with a greater recognition of the role of appearance and the desire for self-improvement [1]. In 1983, Illouz presented his technique of liposuction at the annual meeting of the American Society of Plastic Surgeons [2]. In 2014, liposuction replaced breast augmentation as the most frequently performed surgical procedure, with a 16% increase over 2013 cases and more than \$1 billion spent on the procedure in the United States alone [3].

Specific depths of subcutaneous fat, which vary in different body locations, should be suctioned. For example, the deep and/or intermediate fat layer should be primarily suctioned, but, in rare cases, superficial or subdermal liposuction may be appropriate [4,5].

Surgeons noticed that as the subdermis is approached with liposuction, the potential for skin retraction increased, especially in areas with thin skin [6].

The final frontier in liposuction is skin tightening. Skin tightening involves both skin retraction at surgery and skin tightening with neocollagenesis in the long term. The term, *liposculpture*, is used to describe a procedure that does both fat reduction and skin tightening.

Various lasers and lights have been used in the past for the improvement of skin quality and texture. They act by stimulating new collagen formation, leading to skin retraction in the body and face. All these devices are applied externally, and the energy (laser, light, or high-frequency ultrasound) must cross the epidermal and dermal barriers to reach their targets in the connective tissue [7].

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