



Laser-Assisted Facelifting and Energy-Based Rejuvenation Techniques During Rhytidectomy

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KEYWORDS

- Energy-based devices • Laser facelift • Facetite • Renuvion • Radiofrequency • Helium plasma • Fiber laser

KEY POINTS

- Technology devices can be used to facilitate rhytidectomy.
- Advantages include enhance hemostasis, and ability to dissect in areas difficult to address with surgical techniques only.
- Advantages also include a remodeling of tissue that leads to skin tightening following the application of heat and energy to tissue.
- There have been major advancements in the design and safety features of the devices, which are responsible for the devices becoming more accepted for use as stand-alone treatments or combined with surgery (hybrid procedures).
- The use of energy devices during rhytidectomy does not increase the frequency or severity of complications.

AGING DEMOGRAPHICS AND FACIAL REJUVENATION PROCEDURES

Aging baby boomers are a formidable demographic force in the United States, with a person turning 60 years old every 10 seconds. Age demographic data in 2017 note that between 30% and 40% of the of the total US population is more than 50 years of age.¹ This percentage represents more than 115 million potential patients with skin and laxity of the face and neck. Excisional facial surgery such as a rhytidectomy has long been considered the gold standard of facial rejuvenation, but recent years have seen the introduction of new technologies and energy-based devices for subdermal skin tightening whether used as

a stand-alone treatment paradigm or used concurrently with rhytidectomy. These technologies and applications are presented and critiqued in this article, which concentrates on current technologies being used concurrently with rhytidectomy.

INTRODUCTION TO THERMOPLASTIC RHYTIDECTOMY

For the purposes of this article, thermoplastic rhytidectomy (TPR) is the use of energy-based devices subdermally in a manner that complements the rhytidectomy, whether it is being used for hemostasis or for subdermal skin tightening. TPR also refers to energy-based device use in stand-alone procedures (device

The Renuvion® APR Handpiece is intended for the delivery of radiofrequency energy and/or helium plasma where coagulation/contraction of soft tissue is needed. Soft tissue includes subcutaneous tissue. The Renuvion APR Handpiece is intended for the coagulation of subcutaneous soft tissues following liposuction for aesthetic body contouring. 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 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 intended to be used with compatible electrosurgical generators owned by Apyx Medical.

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Facial Plast Surg Clin N Am 28 (2020) 379–396

<https://doi.org/10.1016/j.fsc.2020.03.006>

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