

PUBLICATION INFORMATION

Sutton C, Abbott J. History of power sources in endoscopic surgery. J Minim Invasive Gynecol. 2013 May-Jun;20(3):271-8. doi: 10.1016/j.jmig.2013.03.001. PMID: 23659747.

FINANCIAL & CONTENT DISCLOSURE: This literature was not supported by Apyx Medical, Inc. The author has no financial connection with Apyx Medical, Inc. The opinions contained herein are those of the authors(s) and do not necessarily represent the official position or policies of Apyx Medical, Inc.

MANUFACTURING DISCLOSURE: Apyx Medical manufactures and owns the J-Plasma technology discussed in this article.

INDICATIONS FOR USE & INTENDED USE DISCLOSURES

- The Renuvion Precise, Precise Open, and J-Plasma Handpieces are intended to be used with compatible electrosurgical generators for the delivery of radiofrequency energy and/or helium plasma for cutting, coagulation, and ablation of soft tissue during open surgical procedures.
- Apyx Medical wants to present to you with current scientific discourse.



RISKS:

- Risk associated with the use of the device may include: Helium embolism into the surgical site due to inadvertent introduction into the venous or arterial blood supply system, unintended burns (deep or superficial), pneumothorax, temporary or permanent nerve injury, ischemia, fibrosis, infection, pain, discomfort, gas buildup resulting in temporary and transient crepitus or pain, bleeding, hematoma, seroma, subcutaneous induration, pigmentation changes, increased healing time, and/or unsatisfactory scarring. There may be additional risks associated with the use of other devices along with Renuvion/J-Plasma and there may be an increased risk for patients who have undergone prior surgical or aesthetic procedures in the treatment area.

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.

To Purchase Article: [https://www.jmig.org/article/S1553-4650\(13\)00146-5/fulltext](https://www.jmig.org/article/S1553-4650(13)00146-5/fulltext)

History of Power Sources in Endoscopic Surgery

Christopher Sutton, MA (Cantab), MB, BChir, FRCOG   •

Jason Abbott, BMed (Hons), FRANZCOG, FRCOG, PhD

DOI: <https://doi.org/10.1016/j.jmig.2013.03.001>

Abstract

Keywords

References

Article Info

Related Articles

Abstract

The history of energy sources used in surgery is inextricably linked to the history of electricity. Milestones include identification of safe electrical waveforms that can be used in the human body, patient isolation to prevent alternate-site burns, bipolar energy sources to negate capacitance injuries, laser energy, and the combination vessel sealing devices commonly used today. Engineering efforts to eliminate many of the hazards of electrosurgery are critical to how we practice modern gynecologic surgery. The introduction of bipolar instruments, increasing the safety of monopolar electrosurgery by not using hybrid trocars, and introduction of active shielding of the instruments from stray radiofrequency energy using intelligent secondary conductors have led to the re-emergence of electrosurgery as the universal surgical energy source. The low ongoing costs and the presence of electrosurgical generators in all hospitals readily enables electrosurgery to be the mainstay. Expensive lasers are confined to specialized centers, where they continue to be used, but for a long while filled a gap created by complications of electrosurgery. Sophisticated power sources continue to be introduced and include the ultrasonic scalpel, plasma surgery, and various devices for sealing vessels, all of which have advantages and