

Electrosurgery: Principles and Practice

Nearly a century after its introduction, electrosurgery remains one of the safest, most efficient, and most cost-effective means of cutting and coagulating tissue while achieving hemostasis. This module helps practitioners to understand the history and principles of electrosurgery as well as the fundamentals of electricity as it relates to electrosurgical function. The biophysical basis of electrosurgery and the implications of techniques are reviewed, along with the methods for hemostasis, tissue manipulation, and dissection. Finally, the safety risks to patients and staff alike are outlined.

Intended Audience: The monograph and case studies are intended for healthcare professionals and medical school faculty who are involved in the primary care of patients seeking information on endometriosis. Healthcare professionals may include family physicians, obstetricians, gynecologists, general internists, nurse practitioners, and physician assistants.

The slide set is intended for use by ob-gyn educators.

Learning Objectives:

Upon completion of this educational activity, participants should be able to:

1. Relate the properties of electricity to the clinical application of electrosurgery
2. Recognize the differences between monopolar and bipolar electrosurgical modalities
3. Discuss variables that influence tissue effects, ranging from output current to moderation of current density
4. Identify potential safety issues specifically related to electrosurgery
5. Describe the current technological advances designed to reduce electrosurgical tissue damage

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