Te Linde’s Chapter 15: Principles of Electrosurgery and Laser Energy Applied to Gynecologic Surgery

**CREOG Learning Objectives:**

1) Describe key considerations and elements with the following aspects of intraoperative care:

- team communication and patient safety measures

- instrument selection and use

- safe use of technology (eg power sources)

**Practice Question:**

1) A 34-year old woman, gravida 0, is undergoing a laparoscopic myomectomy for an 8-cm subserosal fundal leiomyoma. During your dissection, you noticed that your monopolar scissors were in direct contact with the colon during coagulation. Upon inspection of the bowel, you identify an area of white blanching in direct contact without evidence of bowel spillage. The remainder of the case is uncomplicated with a total estimated blood loss of 300 mL. The best next step in management of this bowel injury is:

 A. bowel resection with temporary diverting colostomy

 B. expectant management with intraperitoneal drain placement

 C. oversew the blanched area in two layers

 D. purse string suture around the blanched area in a single layer

 E. segmental bowel resection with reanastomosis

Source: GYN prolog 8th edition # 30

**High-Yield Resources:**

1) SAGES videos (similar but both have useful information)

 - A primer in surgical energy:

<https://www.sages.org/video/primer-surgical-energy/>

- Fundamentals of Electrosurgery

<https://www.sages.org/video/fundamentals-of-electrosurgery/>

2) Education for All lecture: Electrosurgery Dr. Mildad Northwestern University

<https://www.efaobgyn.com/video-library>

3) Principles and Safety Measures of Electrocautery Article – Journal of The Society of Laparoscopic & Robotic Surgeons

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3407433/#:~:text=Principles%20of%20Electrosurgery,-Often%20%E2%80%9Celectrocautery%E2%80%9D%20is&text=Electrocautery%20refers%20to%20direct%20current,alternating%20current%20(Figure%201).&text=Electrical%20current%20flows%20when%20electrons,produced%20when%20electrons%20encounter%20resistance>.

Answer:

1) e