

## Case Study 1

**Use of new electro-surgical instrument to seal and divide tissue 1.0 cm to 12.0 cm per application when performing a TAH.**

- 33 year old woman with 20-week size uterus containing multiple large uterine fibroids.
- Hysterectomy required only 6 RF applications of the LektraFuse Tegos instrument in total
- The gynecologist estimated that the system had "saved 50 minutes" of operative time

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# LektraFuse TEGUS System Case Report

## ■ Patient Profile

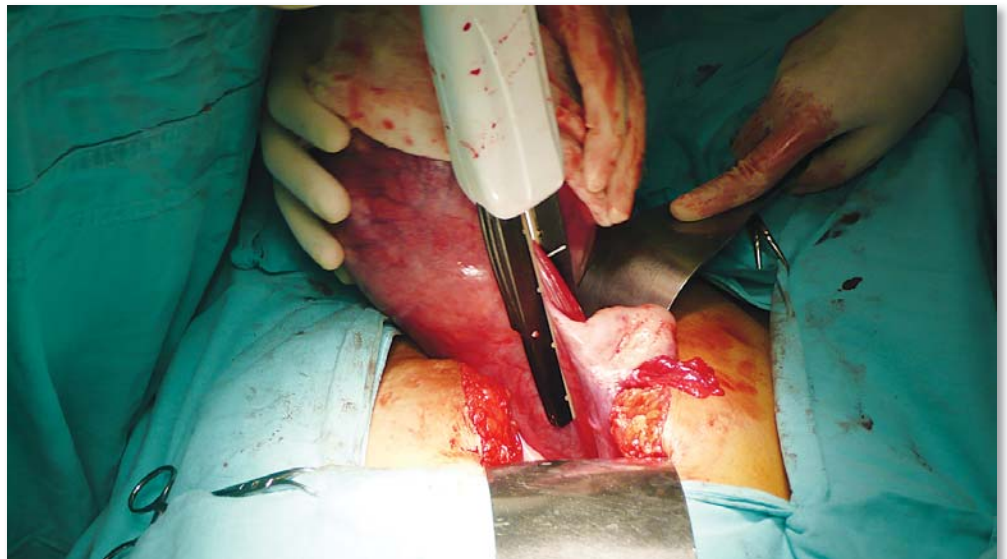
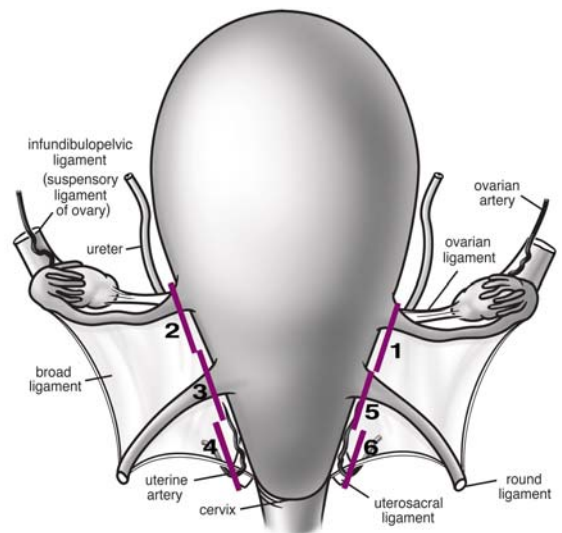
A 33 year old woman presented to her gynecologist with a history of menorrhagia and episodic pelvic pain. Physical examination revealed a palpable pelvic mass, and ultrasonography identified a 20-week size uterus containing multiple, large uterine fibroids (leiomyomas). The patient was scheduled for elective total abdominal hysterectomy (TAH).

## ■ Surgical Evaluation

The abdomen was entered through a lower abdominal midline incision. The 20-week size uterus contained multiple large fibroids. From Fallopian tube to cervical os level, the right parametrial tissues measured 23 cm and the left 19 cm. The grossly normal bilateral Fallopian tubes and ovaries were not targeted for resection.

## ■ Surgical Procedure

The gynecologist routinely used an electro-surgical instrument to seal and divide the tubes, ligaments, and vessels when performing a TAH. The instrument only sealed and divided 1.8 cm of tissue per device application. In this procedure, the gynecologist utilized a new electro-surgical instrument, the LektraFuse™ Tegos™ System from Aragon Surgical; which safely and effectively transects tissue using radiofrequency energy. However, the uniquely versatile LektraFuse Tegos allows for a dramatic reduction in the number of instrument applications, translating into significant operative time savings. The LektraFuse Tegos instrument enables the surgeon to select a range of tissue lengths, from 1.0 cm to 12.0 cm, for rapid sealing and division per device application based on surgical indications. Thus the surgeon may choose to only use the tip of the LektraFuse Tegos instrument to rapidly seal and divide a short length of tissue (around an irregular tumor edge, for example) or rapidly seal and divide a long, straight tissue segment (such as the broad ligament) in one "bite."



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This patient's large, bulky uterus was extremely difficult to retract and maneuver. Thus the gynecologist chose initially to seal and divide the cranial 8 cm of tissue (Fallopian tube, ovarian vessels, and broad ligament) in a single application of the LektraFuse Tegus instrument positioned immediately adjacent to the uterus. This maneuver required only 30 seconds per side and allowed the surgeon to then easily retract the enlarged uterus, providing greater visualization and safety for subsequent bladder flap mobilization. Next, the remaining 15 cm of tissue (broad ligament, uterine artery and vein, and uterosacral ligament) on the right and 11cm on the left were sealed and divided with only two additional LektraFuse Tegus instrument applications (60 seconds) per side. Thus all bilateral attachments to the uterus, including the 7 mm OD uterine arteries and the uterosacral ligaments, were safely divided in only 180 seconds (3 minutes), after which the uterus was resected and the TAH procedure completed in routine fashion. The patient's hospital and post-operative recovery were entirely unremarkable.

### ■ Physician's Post-Operative Evaluation and Comments

The gynecologist estimated that, relative to the standard 1.8 cm electrosurgical instrument, tissue sealing division using the LektraFuse Tegus System had "saved 50 minutes" of operative time, benefitting both his patient and the surgical team. Furthermore, the gynecologist's usual 1.8 cm instrument would have required a minimum of 24 applications, each requiring evaluation of device position relative to the adjacent ureteral course, whereas there was reduced risk of ureteral injury with only 6 required LektraFuse Tegus System applications. In addition, the surgeon believed that adhesion of sealed tissue to the LektraFuse Tegus instrument jaws was noticeably less than adhesions produced by other electrosurgical devices, resulting in reduced manipulation, tearing, and potential bleeding from the tissue sealed with the LektraFuse Tegus instrument. Thermal spread from the LektraFuse Tegus instrument was felt to be equivalent to other electrosurgical instruments. Finally, given that both the corporeal and specimen sides of the tissue are sealed by the LektraFuse Tegus system, the operative field remained blood-free.

