

# Use of the Lektrafuse™ CAIMAN™ with daVinci® Surgical System for Complex TLH/BSO

Dr. Richard Salter, Forest Park Medical Center, Dallas, TX

## PATIENT

53 year old female diagnosed with post menopausal bleeding; comorbidities include sleep apnea, diabetes, high blood pressure, and morbid obesity (BMI 51.2). Patient had gastroschisis at birth resulting in the lack of an umbilicus and subsequent scarring and adhesions secondary to subsequent repair.

## MATERIALS AND METHOD

The Lektrafuse CAIMAN is an advanced laparoscopic electro-surgical instrument introduced in the fall of 2009. This radio frequency (RF) -powered ligator has the longest sealing surface (50 mm) available and is the only RF device with an articulating shaft.

I have used the CAIMAN in many routine robotic gynecological procedures with much success. The longer sealing jaws significantly reduce surgical times and I have seen little to no adhesion or charring. The wide seal footprint reduces any chance of oozing, and the articulating shaft allows placement of the sealing head close to the body of the uterus when fibroids or other distortions of normal uterine architecture would be difficult or impossible with a straight shaft vessel sealer.

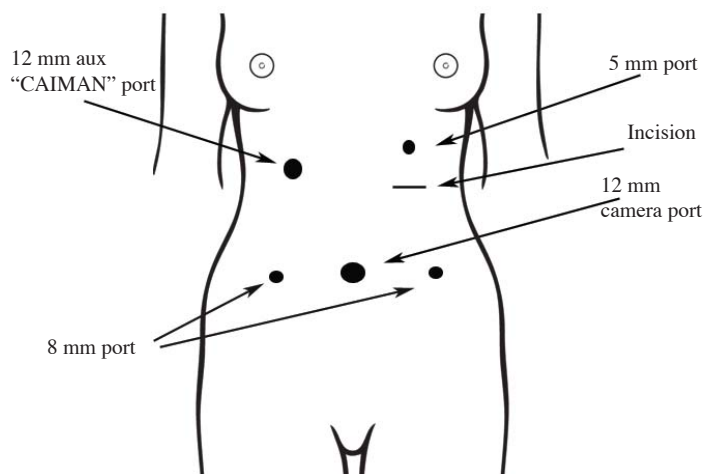
The following daVinci hysterectomy and BSO proved to be a challenge due to the complications from her gastroschisis repair and her morbid obesity. Port placement in this case needed to be adjusted due to scar tissue in the umbilical area and numerous adhesions.

The patient was placed in the dorsal lithotomy position, legs were abducted and knees flexed, thighs were at table level. All patient preparation was done in accordance with standard protocols. Just prior to the procedure the patient was placed in steep Trendelenburg position and the daVinci patient cart was positioned next to the patient and locked.

A small left upper quadrant incision was made to facilitate placement of the Veress needle and insufflation of the abdomen. A 5 mm port was placed at the insufflation site.

After a 5 mm laparoscope was used to identify the location of the adhesions, two additional 5 mm ports were placed bilateral to the adhesions to be used for adhesiolysis. The adhesions were taken down using a hook electrode and hot scissors. A loop of small bowel was left densely adherent to the anterior abdominal wall. The decision was made to leave this loop, as the patient was not having any gastrointestinal complaints.

After clearing the adhesions, one 12 mm port was placed in the midline approximately 5 cm superior to the site of a normal umbilicus. Two daVinci 8 mm ports were placed 10 cm lateral to the position of the 12 mm camera port, and a 12 mm auxiliary port was placed in the RUQ to be used as an access port for the CAIMAN device. The fenestrated bipolar forceps, and the monopolar scissors were attached to the robot and advanced into the abdomen.



---

Address of correspondence: Wm. Richard Salter, MD, FACOG, Advanced Ob-Gyn Associates, 1919 South Shiloh Rd. , Suite 333, Garland, TX 75042.

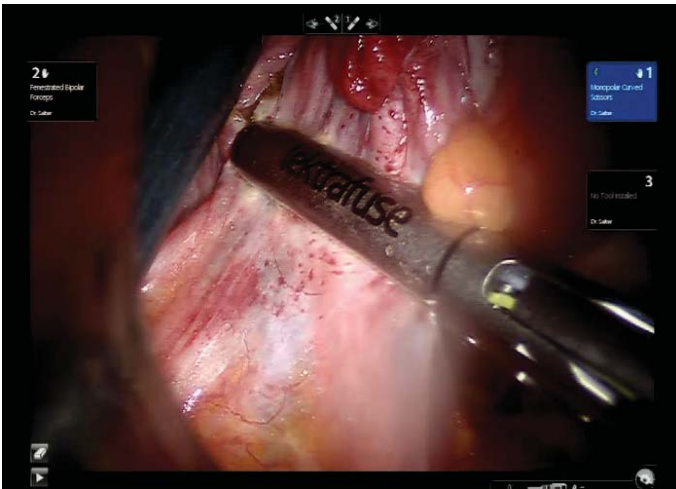
daVinci is a registered trademark of Intuitive Surgical.

The CAIMAN RF instrument was introduced through the 12 mm auxiliary port in the RUQ. In this case, because of the unusually high lateral position of the auxiliary port, the CAIMAN's ability to articulate allowed access to uterine structures that would not have been possible with a straight instrument. Each side of the uterus was mobilized in 2 to 3 consecutive passes. The first pass included the right side infundibulopelvic ligament and ovarian vessels, the second the broad ligament and the third sealed and divided the right round ligament. Only 2 passes were required on the contralateral side and all passes resulted in clean, complete seals with no oozing, adhesion or charring all while maintaining clear visibility.

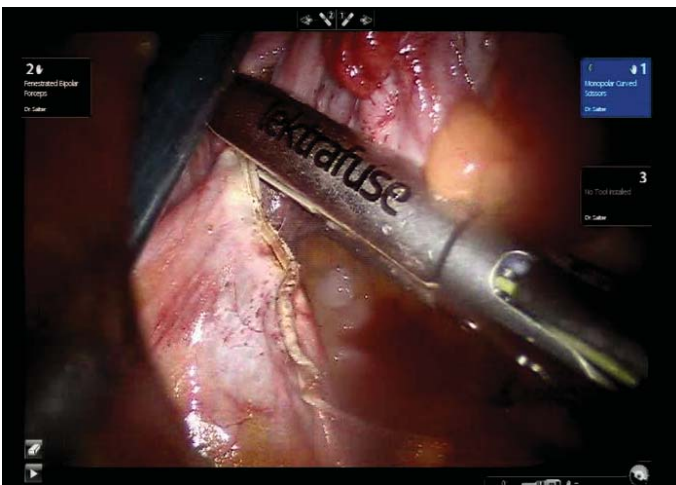
The monopolar scissors were used for further fine dissection down to the vaginal cuff, and the daVinci System was used to complete the procedure.

## CONCLUSION

Using the Lektrafuse CAIMAN in conjunction with the daVinci Surgical System resulted in a time savings of about 25 minutes for this procedure. The large jaw volume quickly divided the ovarian pedicles without charring or bleeding. In addition, the unique articulating abilities of the CAIMAN made it flexible enough to accommodate less-than-ideal port placement. This instrument is easy to use in the simplest cases and performed well during this complex procedure.



**Figure 1:** CAIMAN's large 50 mm sealing surface quickly seals and divides parametrial tissue in 2 to 3 passes.



**Figure 2:** Uniform compression and advanced Lektrafuse technology combine to create clean even seals with little charring or thermal spread.



Wm. Richard Salter, MD, FACOG  
Forest Park Medical Center  
Dallas, TX

ARAGON  
SURGICAL

1810 Embarcadero Rd., Ste B  
Palo Alto, CA 94303  
United States of America (USA)

[www.aragonsurgical.com](http://www.aragonsurgical.com)

Tel: (650) 543.3100  
Toll Free: (888) 207.2058  
Fax: (650) 740.7535  
Email: [cs@aragonsurgical.com](mailto:cs@aragonsurgical.com)