



Janet Padgham, Director  
0418 204 910  
jpadgham@gytech.com.au



Simon Kent, National Sales Manager  
0411 230 532  
skent@gytech.com.au



Susie Bilson, Account Manager TAS  
0418 204 991  
sbilson@gytech.com.au



Bree Plunkett, Account Manager NSW  
0418 204 476  
btozer@gytech.com.au



Julie Isbill, Account Manager NSW  
0438 363 452  
jisbill@gytech.com.au



Ross Turner, Account Manager NSW  
0418 204 775  
rturner@gytech.com.au



Kerrin Ball, Account Manager VIC, SA, WA  
0418 204 904  
kball@gytech.com.au

## Safeguarding Patients from Stray Electrosurgical Burns

By Vangie Dennis, RN, CNOR.

In the past decade 25% of open surgical procedures in the U.S. have been converted to laparoscopic surgery. More than 85% of surgeons use monopolar electrosurgery for laparoscopic procedures. This year 4.4 million laparoscopic procedures will take place. These numbers all add up to this staggering fact: more and more patients are being exposed to a new and different safety risk – the risk of stray electrosurgical burns.

Stray electrosurgical burns can be fatal. Burns are caused by stray energy resulting from insulation failure (a break in the insulation surrounding the active electrode) and capacitive coupling (an electrical phenomenon whereby current passes through intact insulation). Insulation failure and capacitive coupling cause electrical current to come in contact with non-target tissue, causing unintended injury. Unlike external skin burns, which are usually recognised immediately following a case, stray electrosurgical burns occur outside the view of the laparoscope and unbeknownst to the surgeon. Because the surgeon is unaware of the stray electrical currents during surgery, he/she is unable to intervene and prevent injury to the patient.

Significant morbidity is associated with stray electrosurgical burns, including physical pain and suffering, a prolonged recovery, extensive follow-up medical treatment and corrective surgeries that radically affect a patients physical abilities and quality of life. The complications of these stray internal burns can put the patient in a life threatening condition. The most feared complication is bowel perforation, resulting in intestinal content leaking into the peritoneal cavity (i.e. faecal peritonitis). Bowel injury and resulting complications account for most of the fatalities associated with laparoscopic procedures.

The seriousness of stray electrosurgical burns should convince all professionals to take a proactive stance in ensuring patient safety during laparoscopic monopolar electrosurgical procedures. Introducing Active Electrode Monitoring (AEM) technology to surgical facilities guarantees the prevention of unintended laparoscopic burns. AEM is a system in which shielded and monitored instruments continuously direct stray energy away from the patient via a protective shield. In the event insulation failure occurs or capacitively coupled energy reaches dangerous levels, the electrosurgical unit (ESU) shuts down automatically and the surgical staff are alerted. With the AEM system, the patient is never at risk for stray electrosurgical burns due to insulation failure and capacitive coupling.

Nationwide more than 300 hospitals have converted to AEM technology, with the number growing every year. The cost justification for AEM technology is relatively easy. Through attrition, laparoscopic instruments are replaced yearly. Replacing worn and defective instrumentation with reusable AEM instrumentation in many cases actually reduces the cost per procedure. Use of AEM instruments eliminates the chance of catastrophic patient injury, thereby reducing the hospitals liability exposure in laparoscopy.

Currently in the market place there is only one company that provides AEM laparoscopic instruments. That company is Encision based in Boulder Colorado. Encision has a full line of 5mm AEM laparoscopic instruments that are equivalent in function, ergonomics, size, shape, length and tip styles as conventional instruments but with advanced safety from the shielded and monitored AEM design.

**CooperSurgical Products**

**ZUMI – 4.5 Uterine Manipulator**

Zumi – 4.5 is the most widely used latex free uterine manipulator

Most reliable – avoids catheter expulsion, requires minimal cervical dilation

Sterile, disposable, ready for use. Just sound, insert and inflate

Facilitates manipulation of both anteverted and retroverted uteri

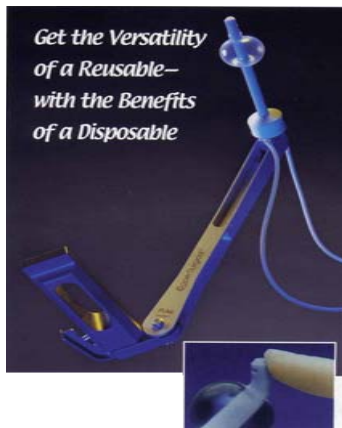
Injector channel integral to Zumi – 4.5, eliminates the need for a second instrument



**Rumi Uterine Manipulator**

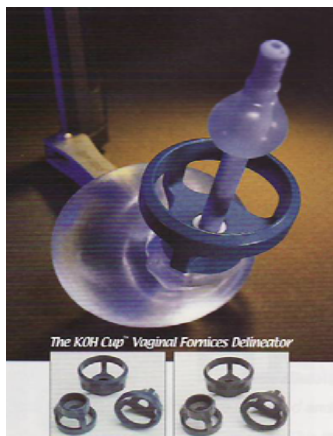
The Rumi System benefits all laparoscopic uterine procedures by greatly improving the visualisation of, and access to pelvic structures. With its unique handle and articulating tip design, maximum exposure is accomplished with finger tip control.

Multiple tip sizes (6, 8 and 10cm) are constructed with a soft tip for less trauma during insertion and use



**Koh Colpotomizer System**

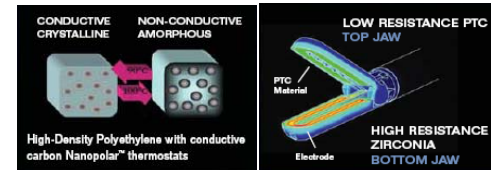
A unique product innovation that clearly delineates the vaginal fornices for effective laparoscopic colpotomy incision without loss of pneumoperitoneum. The Koh Cup Vaginal Fornices Delineator and the Colpo-pneumo Occluder comprises the complete Koh System.



**EnSeal Vessel Sealing Technology**

*Precise PTC Controlled Heat*

EnSeal PTC is the first and only sealing device that controls energy deposition at the electrode-tissue interface. Millions of carbon Nanopolar thermostats control tissue temperature through the use of Positive Temperature Control (PTC) technology designed into the jaws of the EnSeal disposable device.



**Hunt Cannula Trocar**



Designed for easier sleeve insertion and to lessen risk of patient injury

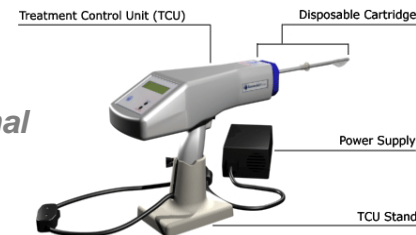
Specially designed, clinically proven fascia anchoring threads hold cannula securely in place, regardless of number of instrument exchanges

Only device on the market that permits suturing through the cannula

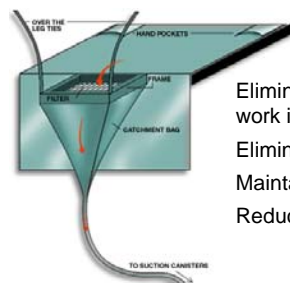


*The newest endometrial thermal balloon ablation system*

**CALL NOW FOR A TRIAL**



**Under Buttock Drape**



Eliminates the guess work in fluid monitoring  
Eliminates contamination  
Maintain sterility  
Reduce theatre time



**Staff News**

Gytech would like to welcome Ross Turner and Kerrin Ball to the National Sales Team. Ross will be one of three Account Managers working within New South Wales and Kerrin will be servicing Western Australia, South Australia and part of Victoria. Welcome to you both.

We would also like to welcome back Bree Plunkett (nee Tozer) after the birth of her son Isaac.