Access Granted

Minimally invasive surgery, while constantly continuing to develop and seeing its own techniques and technologies growing by leaps and bounds, is still in its infancy. Nonetheless, the general consensus, both in the OR and out, is that this is the direction that surgery will be taking into the future. More and more procedures are being attempted and meeting with success through the minimally invasive approach, and with the inherent benefits for the patients undergoing such procedures, that is a blessing.

However, the likelihood that minimally invasive surgery will replace open surgery altogether is slim at best. There are certain procedures that are all but impossible to perform without full access to the surgical site. In addition, there are those times when a minimally invasive procedure will have to be adjusted to an open surgery due to complications or the discovery of unforeseen ailments that require surgical attention.

In open procedures, and minimally invasive procedures for that matter, the success of the surgery depends a great deal on the quality of the access that the surgeon has to the surgical site. Advancing technology has enabled us to peer inside a patient, but without access to the problem area, and the ability of the surgeon to use his hands and instruments, that technology is all but pointless.

Fortunately, the retractors that played such an important part in the days of open surgery have not fallen by the wayside in the wake of evolving surgical technology. In fact, they have been evolving as well to provide better access, cause less trauma, and even assist in minimally invasive procedures. Here are a few innovative companies who have been at the forefront of retraction's latest advancements.

Cardinal Health

Cardinal Health offers a wide variety of instrumentation for retraction under its V. Mueller&reg brand of products. These instruments vary from simple hand held and self retaining retractors to full table mounted retractor systems, and many of these retractors can be used for multiple procedures. Some of the retractors in the V. Mueller line have been around for decade, but other exclusive retractors have only recently become available.

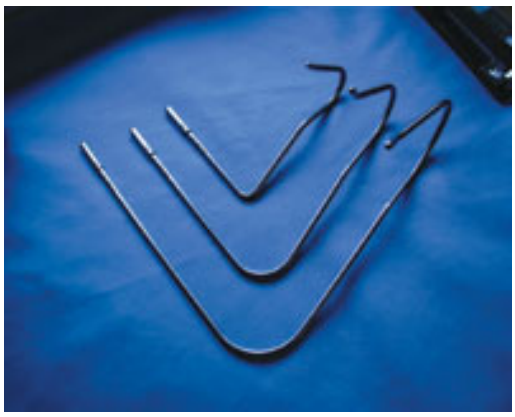
One of the latest developments in the V. Mueller line is the Multipurpose Abdominal Retractor System (MARS), which was designed with flexibility in mind. The MARS is a single system that can be extended from a standard retraction kit all the way up to a bariatric retraction kit.

Also new to the Cardinal Health line-up is the offerings of the recently acquired Snowden Pencer&reg line. Among the newly acquired instrumentation is the full Diamond-Flex portfolio of laparoscopic retractors, which can be used in conjunction with the Fast -Clamp endoscopic clamping system. The Diamond-Flex line includes a selection of articulating retractors specially and ergonomically designed to meet the need of laparoscopy.

Lone Star Medical Products, Inc.

The Lone Star Retractor System is a self-retaining system that is comprised of a retractor ring and elastic stay hooks. Weighing less than half a pound, the lightweight system can be applied at any angle. While the Lone Star System is flexible enough to be used in a variety of applications, it has proved in the past to be especially valuable when used during certain procedures such as rectal (prolapse or hemorrhoid), vaginal vault and pelvic floor repair, and in certain urological procedures such as prostatectomy and urethral reconstruction and repair. In addition, surgeons have been finding the easy to use system conducive to vascular and reconstructive surgery. The Lone Star Retractor System is also ideally suited for the soft tissue retraction and small operative fields associated with certain general surgeries.
While not necessarily intended for use in minimally invasive procedures, some surgeons have been experimenting with its potential. Barbara Smith, Director of Business Development at Lone Star Medical is optimistic. “This is a new field for us, and one we hope surgeons would be willing to explore further. For example, the Lone Star Retractor System has been used in laparoscopic myomectomy, pulling the uterus up to the abdominal wall for direct visualization and closure of the uterine wall after laparoscopic fibroid removal. The surgeon-user prefers to get that direct visual to make more secure repair, rather than attempting to do so through a trocar.”

Automated Medical Products Corp.



Automated Medical Products is committed to assisting surgeon in minimizing patient trauma by providing state of the art retractors and retraction accessories to the OR. Their premier product is the Iron Intern&reg Mechanical Retractor System, a precise and easily adjusted retractor holder that mimics the human arm in its motion. Available in one or two arm configurations, all joints on the Iron Intern can be locked with the turn of a single wing nut when the retractor is positioned correctly. Completely sturdy, the Iron Intern will hold the retractor in the exact place it is positioned, but still allows for easy adjustment should it be necessary.
Another offering from Automated Medical is the specially designed Stieber Rib Grip Kit. This retractor system provides great operative exposure for all patients, from pediatrics to morbidly obese adults. The high quality ratchet-type system reduces the requirements for additional assistants by providing optimal adaptability of the retractor blades, allowing for easy access to the entire upper abdomen. The union between the Hydra Yoke (the two armed Iron Intern retractor holder) and the Lees Center platform provides the opportunity to grasp with two additional retractors.
To assist in laparoscopic surgeries, Automated Medical offers another specially developed retractor set. The Nathanson Hook Liver Retractors are designed specifically to retract the liver during laparoscopic surgery. When required, the hooks hold the liver out of the way for the duration of the procedure. They come in a set of three (small, medium, and large), allowing the surgeon alternative options throughout the surgery. The Nathanson Hook Liver Retractors are easy to clean and will last forever. They can, of course, be used in conjunction with the Iron Intern systems.

Spectrum Surgical Instruments Corp.

Spectrum Surgical recently released their latest addition to the surgical retraction market. Made in Germany using the finest surgical stainless steel, the Abdominal Flexible Retractor System is priced 40 percent lower than competitive units. This

fully autoclavable system is conveniently housed in two closed container sterilization trays, which have etched schematics that allow for easy assembly and use. Ina addition to offering the complete retractor system, Spectrum Surgical also offers individual components and performs complete restoration service, including welding broken blades and tilt ratchet repair.

Applied Medical

Responding to the trend toward minimally invasive surgery and drawing from their expertise in Hand Assisted Laparoscopy products, Applied Medical developed the Alexis wound retractor to provide atraumatic retraction that traditional metal retractors could not provide in most cases. “The Alexis retractor affords surgeons the opportunity to incorporate atraumatic retraction and protection as the standard of care in every open and laparoscopic procedure,” explains Richelle Lavin, Product Manager at Applied Medical.
The Alexis wound retractor provides 360 degrees of atraumatic circumferential retraction and 360 degrees of protection. It provides excellent exposure without the trauma associated with point retractors, while protecting wound margins from contamination. As a result, this retractor can facilitate wound approximation and may also aid in reducing post-operative pain, bruising and edema of the abdominal wall.
The Alexis retractor's unique design facilitates rapid and effortless set-up and accommodates a wide variety of procedures including colectomy, myomectomy, gastric bypass, and cesarean section. It is available in five sizes, for use on incisions ranging from 2.0 cm up to 17.0 centimeters.

Lumitex, Inc.

While Lumitex does not supply an actual retractor system, it does provide an interesting accessory to be used with retractors. The LightMat&reg Surgical Illuminator is a surgical lighting product that attaches to most retractors. It employs a unique patented technology that brings cool, shadowless, radiant light directly into aca surgical cavity via a thin flexible mat that attaches to the surgeons retractor. This light can be used in any deep cavity, under flaps, or in lateral margins.

The LightMat is designed for minimally open and non-laparoscopic procedures (primarily GYN, plastic, spinal, orthopedic, and deep general surgeries), where it is difficult to get a headlight or overhead lighting into the cavity. The LightMat is especially helpful on a mobile retractor, to apply light where it is needed. With a good xenon light source, the effect is like having fluorescent light inside the cavity. As anyone can see, not all retractors and retractor systems are the same, and this can be a good thing for the surgeons, as not all patients or cases are the same. If the past is any indication of the future, the way surgery is performed will continue to change. But as long as the makers and marketers of retraction systems continue to develop their products and evolve their technology, they will still be there to grant access to the next generation of surgeons.
otc

Source URL (retrieved on *08/21/2014 - 3:40pm*):
http://www.surgicalproductsmag.com/product-releases/2005/04/access-granted?qt-most_popular=0