

## LAPAROSCOPY

One of the most frequent procedures performed by gynecologic surgeons is laparoscopy. It has become very common within the past twenty years and has revolutionized the way in which the most frequently encountered gynecologic conditions are diagnosed and treated. It is most often performed as an outpatient procedure and most patients recover within days. This procedure is done by general surgeons also but it is most relevant to conditions within the pelvis. In the past, exploratory surgery was performed with a "regular" three inch or greater incision into the abdomen either from navel down or with a "bikini" cut. Time spent in hospital could be as long as week, the pain was greater as more skin was opened and it is acknowledged that nerves in the skin contribute greatly to postoperative pain, and recuperation time was as long as six weeks to allow all the layers to heal and for sutures to dissolve. Laparoscopy is a way of doing surgery by making a very small incision(s) through which a laparoscope (a lighted tube attached to a camera and then to a television screen) is inserted. Frequently other small incisions are made through which specialized instruments are inserted to perform procedures described below.

There are many uses for laparoscopy in gynecology. One of the most common is to find the cause of chronic pain. It can be used to diagnosis and treat some conditions such as endometriosis (discussed in a previous article). The condition appears as blue black spots or as active bleeding and can be treated by laser or heat through these small incisions. Fibroids are growths on the outside of the uterus and sometimes can be removed through a laparoscopic procedure either partially or totally depending upon the size and location. Ovarian cysts that are larger than what would be expected in an ovulating woman or are painful can be either drained or removed laparoscopically. Pregnancies that arise in the fallopian tube can cause severe pain, bleeding, and mortality if not treated expeditiously and can now be done safely laparoscopically. Perhaps the most common use is sterilization where the tubes can be visualized and then either cut, burnt, or clipped. Most recently laparoscopically assisted vaginal hysterectomy (lavh) is gaining favor. In this procedure, the blood supply and ligaments are cut through the scope and the uterus is removed vaginally without a large incision and a much shorter hospital stay and short recuperation time is the norm.

Again this is done as an outpatient procedure but sometimes might require an overnight if the procedure was complex. General anesthesia is done so that pain relief, sleep, and muscle relaxation can be performed. Once asleep, carbon dioxide is used to fill the abdomen to create a space between the organs so that they can be seen more clearly. Other incisions can be made as necessary pending the condition being treated and there seems to be no end to the ingenuity of what is being offered as minimally invasive surgery is becoming the norm. After the procedure, the instruments are removed, the gas evacuated and the small incisions closed with stitches, tape, or a special surgical glue.

Most patients awaken in the recovery room with no sensation that any time has passed. There is mild discomfort at the incision sites and frequently right shoulder pain from gas that collects under the diaphragm. Upon going home, if pain increases your doctor should be called immediately. Most patients can resume normal activities within 2-3 days.

All procedures should be evaluated by weighing the risks against the benefits. Of course the benefit is making a diagnosis and treating it through a small incision with a rapid recuperation time and little disability. There is a small risk that there might be bleeding or hernia at the incision site, internal bleeding, infection, damage to other organs, and problems from anesthesia. Informed consent will spell these out in detail. While the incision(s) are small, surgery should never be taken lightly and the pros and cons should be discussed with your doctor at length.