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A little change can change a lot! Rev. Charles Golla, Motivational Speaker

Who likes change? No one! Change is a painful process. Some people fear changing a house, as they are emotionally attached to it. It is very difficult to change our attitude or alter our plans or modify our eating habits or to transform ourselves in any way as these things are embedded deep into our lives.

As we know, Eagle is the king of all birds. It can have a life span of seventy years. But when it is forty years old, its beak becomes dull and bent; its wings become heavy to fly, therefore, the feathers get stuck to its body. Its talons by now are weak and are no longer able to catch its prey. It has two options: either to die or to go through a painful process of change in order to live for another thirty years. So it goes to the top of a high mountain and sits on its nest. It knocks out its beak against a rock and waits until it gets a new and sharp beak. Then it plucks out the old talons and feathers. This eagle sits on its nest for a total of one hundred and fifty days to get back its new feathers, wings and strength. Once it regains its strength, the eagle takes off and soars high above the storms and the high winds and lives for another thirty years.

Why is change needed?

In order to survive and live a happy and contented life! A person must start a changing process and change his/her old habits, negative thinking and adapt to new things in life. Transition causes adjustment, discomfort, disruption and dislocation. When a new member is added into a family,

everyone has to make an adjustment to accommodate that person.

As we remove dirty clothes and put on new clothes, in the same way, we must remove negative thoughts and destructive behaviour and put on positive thoughts and constructive behavior. These changes do not come easily so we need to make a sincere and a conscious decision to bring changes in our life for our betterment. These changes also help us to face our problems and struggles like sickness, financial crisis, loss of a dear one, unemployment and overcome them.



'Sea change' at Cape Town, South Africa on Aug 15, 2009. At Cape Point, Atlantic ocean meets Indian ocean...

James K. Styner, MD, FACS is an orthopaedic surgeon, practicing in Lawndale, California. He was instrumental in the development of the **Advanced Trauma Life Support (ATLS)** program.

In 1976, when orthopaedic surgeon Dr. James K. Styner, piloting a light aircraft, crashed his plane into a field in Nebraska. His wife was killed instantly and three of his

four children sustained critical injuries. He carried out the initial triage of his children at the crash site. Dr. Styner had to flag down a car to transport them to the nearest hospital; upon arrival, he found it closed. Even once the hospital was opened and a doctor called in, he found that the emergency care provided at the small regional hospital where they were treated was inadequate and inappropriate. The doctors at the hospital had little training in the management of serious trauma and Styner was particularly concerned that they did not make any attempt to protect the injured children's cervical spines. He called his partner Bruce Miller and they were evacuated by helicopter to Lincoln General Hospital.

Upon returning to work, he set about developing a system for saving lives in medical trauma situations. Styner and his colleague Paul 'Skip' Collicott, with assistance from Advanced Cardiac Life Support personnel and the Lincoln Medical Education Foundation, produced the initial ATLS course which was held in 1978. In 1980, the American College of Surgeons Committee on Trauma adopted ATLS and began US and international dissemination of the course. Styner himself recently recertified as an ATLS instructor, teaching his Instructor Candidate course in the UK and then in the Netherlands.

Since its inception, ATLS has become the standard for trauma care in American emergency departments and advanced paramedical services.

Suviraj J. John

Nothing is so fatiguing as the eternal hanging on to an uncompleted task. William James

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Mr. R. S. Bhatia, Dr. Parveen Bhatia, Dr. Indu Bhatia, Dr. Sandeep Chopra, Sanchit Bhatia

Total Laparoscopic Hysterectomy (TLH): Ten Steps

Dr Pulkit Nandwani, 9971573637, MD (Gynae), Gynaecologic Associate. Dr. Indu Bhatia, 9810138656, Consultant Laparoscopic Gynaecologic Surgeon, Bhatia Global Hospital & Endosurgery Institute, New Delhi email: bhatiaglobal@gmail.com

Hysterectomy is one of the most common surgical procedures performed by gynecologists. The standard approach to the procedure is either abdominal or vaginal removal of the uterus. However, new developments in endoscopic surgery have made the laparoscopic approach a viable alternative for women needing a hysterectomy. While a growing number of gynecologic surgeons have added the skills necessary for laparoscopic hysterectomy to their armamentariums, many of their colleagues have balked at adopting the procedure, citing concerns about excessive operating time, spiraling costs, and frequent complications.

Indications

The indications for laparoscopic hysterectomy are similar to the generally accepted indications for hysterectomy.



TLH in big size uterus

1. Symptomatic Fibroids
2. Abnormal uterine bleeding
3. Adenomyosis
4. Adenexal masses
5. Endometriosis
6. Chronic pelvic inflammatory diseases
7. Stage 1 Endometrial & Ovarian cancer

Contraindications

1. Postpartum hysterectomy
2. Medical contraindication for laparoscopy
3. The size of the uterus and access to it also limit the scope of the procedure

depending on the experience of the surgeon.

Attention to Detail: The Key

Successful, efficient laparoscopic hysterectomy requires careful attention to detail right from the start

Preoperative preparation

Good bowel preparation is desired for TLH and is mandatory in patients with previous surgeries, endometriosis, big uterus, etc. Patient is kept on liquid diet for 2 days and the night before surgery Peglec (2 packets) is given to the patient.

Anaesthesia

General anaesthesia with endotracheal intubation.

The use of a naso-gastric tube avoids trocar injury to the stomach and reduces bowel distension.

Position of patient

Proper patient positioning is essential to prevent complications and to facilitate manipulation of the uterus. The Allen stirrups allow the legs to be supported in a physiologic position that permits access to the vagina at the start of the procedure and continued access to the uterine manipulator throughout the remainder of the operation. The thighs are elevated 10 degrees above the horizontal plane and externally rotated 15 degrees to provide adequate access to the vagina. To reduce the risk of compartment syndrome, care is taken to avoid putting pressure on the calves.

Positioning of the operating staff

The surgeon stands on the left side of the patient, the first assistant stands on the surgeon's side and holds the camera. There should be two monitors to allow staff on either side of the table to follow the operation. The surgeon has both hands free for surgery. The nurse is between the patient's legs and has the double role of scrub nurse

and vaginal manipulator.

Instruments

1. Trocars— one 10mm, two 5mm, one 10mm (if morcellator is to be used) otherwise 5mm Telescope
2. Graspers—atraumatic (Hunter) & traumatic
3. Harmonic (Ace) scalpel
4. Electrocautery—bipolar forceps & monopolar hook
5. Myoma screw
6. Needle holder
7. Scissors—curved
8. Suction irrigation system

Readying the Ports

A vertical infraumbilical incision is made with a No. 11 blade. The subcutaneous tissue is spread with a hemostat, and the fascia is grasped with a Kocher clamp and elevated from the patient. Grasping the fascia creates a space free of intestine directly beneath the umbilicus. This short distance allows safe introduction of the Veress needle. After insertion of the Veress needle into the peritoneal cavity, the position of the needle tip is confirmed using the plunger technique. Adequate pneumoperitoneum is established. A disposable 10-mm or 11-mm trocar is introduced into the peritoneal cavity. The 10-mm laparoscope is inserted and the peritoneal cavity is inspected.

The patient is placed in steep Trendelenburg position, and placement of the lateral trocar sites is determined by using the laparoscope to transilluminate the abdominal wall. In most patients, transillumination allows blood vessels to be identified, enabling selection of trocar insertion well away from those vessels. Under direct observation, two 5-mm trocars are introduced lateral to the rectus muscles on either side. Another 5mm trocar is placed in the vertical line of umbilicus about 5cm above pubic symphysis.

Step by step procedure

1. Exploration of the abdominal and pelvic anatomy with special attention to the location of the pelvic ureters, major blood vessels, colon and rectum.



Exploration of ureter and iliac vessels

2. Myoma screw is inserted for uterine manipulation. Role of Myoma screw is most important. By its movement visualisation of either side is achieved. Uterus can also be anteverted (for posterior colpotomy) or retroverted (for bladder dissection).



Myoma screw being inserted

3. The upper pedicle consisting of round ligament, ovarian ligament and fallopian tube are dissected successively using Harmonic scalpel on either sides. The round ligament is grasped at short range from uterus but leaving atleast 1cm of stump towards uterus.

If ovaries are to be removed then Infundibulopelvic ligament are grasped by harmonic close to the ovary and desiccated.



Dissection of upper pedicle

4. Opening of Broad ligament and Bladder dissection.

Peritoneum is only one cell thick.

Due to the thin nature of peritoneum, only by teasing action of grasper the two leaves of peritoneum are separated and the anterior leaf of broad ligament is successively dissected using harmonic on either side moving from lateral to medial. Once anterior peritoneum is cut, the bladder is pushed down using a wet gauze.

Small (about 4cm size) gauze piece is wettened and edge is held with grasper. Telescope is removed and the grasper inserts gauze via 10mm trocar. Then telescope is reinserted.

Inside the peritoneal cavity, gauze is again held by grasper and pressure is applied by the gauze onto the cervix, thus pushing the bladder down. This is the most effective as well as the easiest way as no bleeding is encountered and one or two movements are all that is required.

To remove the gauze, edge of the gauze is held by grasper. The grasper holding the gauze along with the 5mm canula is removed from the skin. As the grasper is catching the gauze, the gauze is pulled out of the abdominal tract.



Bladder dissection with gauze

5. Dissection of Uterine vessels

The main principle in laparoscopic hysterectomy is to take small but sure steps and to stay close to the uterus. It is commonly said that "Kiss the uterus but from a safe distance".

While dissecting, if we go more lateral then chances of damage to the ureter is there, while in a too medial approach, chances of damage to ascending branch of uterine vessels is present.

If bleeding is encountered, Bipolar coagulation can be done. Thus surgeon progresses towards the uterosacral ligaments.

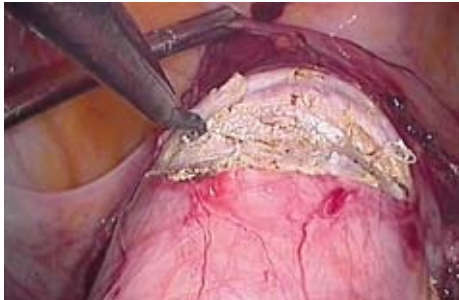


Uterine artery coagulated with harmonic

6. Opening of Vaginal vault

A tampon made with gauze and held by sponge holding forceps is inserted vaginally into the anterior fornix. The cervico-vaginal junction is identified and anterior colpotomy done using monopolar hook. Once freed, the anterior

lip of cervix is held with toothed grasper and rest of the colpotomy is carried out.



Anterior Colpotomy

7. Delivering out Uterus

Uterus can be delivered out vaginally via the colpotomy wound or via abdominal route (using a morcellator).

For vaginal delivery of uterus, assistant inserts Sims speculum into the vagina. Laparoscopically the surgeon takes the cervix upto the colpotomy wound. After clear visualisation of the cervix, the assistant catches the lip of cervix with vulsellum and by rotating motions and successive application of cervical clamps uterus is delivered out. In case of large uterus or myomas, piece-meal removal of uterus is required.



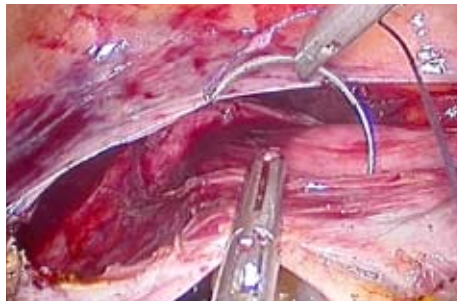
Morcellation



Specimen

8. Closure of Vault.

Can be done vaginally or laparoscopically according to the surgeons preference.



Suturing of vault

9. Check laparoscopy

To ensure hemostasis and reconfirm ureteral and bladder integrity.



Vaginal vault after TLH

10. Removal of trocars.

All trocars are removed under vision. Lastly the 10mm umbilical trocar is pulled out over the telescope. The telescope is then slowly removed visualising all abdominal layers while deflating the abdomen.

Postoperative Care

Patients are discharged 24 to 48 hrs after surgery. Mild narcotic analgesics are usually

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sufficient to control post surgical pain. The patient can resume her day to day activities from the next day onwards.

Complications

1. Intra-operative complications

Haemorrhage – Most common complication. It is the main reason for laproconversion.

Incidence can be markedly decreased by following proper technique.

Ureter injury, Bladder injury, Bowel injury

2. Post-operative complications

a. Post-operative ileus

b. Haematoma

c. Delayed urinary tract injury

d. Peritoneal complications.

e. Thrombo-embolism.

In five different studies, the overall complication rate for laparoscopic hysterectomy was less than 10%. This rate is lower than that reported for abdominal and vaginal hysterectomies. In six randomized, controlled studies of laparoscopic versus abdominal hysterectomy, the former took longer to perform. However, the laparoscopic approach was associated with less postoperative pain, a shorter hospital stay, and a quicker recovery. Most studies have also documented less postoperative fever, decreased blood loss, and fewer transfusions with the laparoscopic approach.

From the patient's point of view, the advantages are apparent in a shorter hospital stay and a faster return to normal duties

In conclusion, laparoscopy permits the transformation of many abdominal hysterectomies into less invasive procedures. Improvement of techniques and instruments, including morcellators will allow us to reduce the problems and complications as well as the duration and cost of surgery.