Laparoscopic Radical Hysterectomy

R.K.Mishra

History

Clark performed the first radical hysterectomy for cervical cancer at Johns Hopkins Hospital in 1895 LARVH First performed in 1991 by "Querleu and colleagues". LRH first performed in 1992 by "Canis and Nezhat".

Advantage of LRH over LARVH

LARVH frequently requires perineal or vulvar incisions to facilitate the dissection. These quite painful incisions are avoided with the laparoscopic radical hysterectomy technique

Advantage

Proper working space Proper Ureteral tunnel dissection More complete dissection Episiotomy not necessary More complete diagnosis of metastasis Avoid untouched lymphadenectomy Less pelvic Adhesion

LARVT VERSUS LARVH

Early cervical cancer (less than 2 cm diameter) can be treated successfully with LARVT with similar efficacy and recurrence rates to LARVH

Trachelectomy

- The prefix "trachel-" comes from the Greek "trachelos" meaning neck.
- Trachelectomy is done in younger women with early cancer of the cervix (with a tumor no larger than 2-3 centimeters).
- The cervix and the upper part of the vagina are removed.
- The lymph nodes in the pelvis are also removed.
- After trachelectomy it is sometimes possible for the woman to have children.
- A stitch is made at the bottom of the uterus like a drawstring and this takes the place of the cervix during pregnancy.
- There is a higher chance of miscarriage for women who have this procedure, and the baby needs to be delivered by caesarian section.
- wTrachelectomy is also called cervicectomy.

Preoperative measures

Bowel preparation

- Peglac powder from 2 days before with liquid diet
- Oral Erythromycin and Neomycine and Setronidazole
- Lee Huang optical port
- Use of ureter stent to avoid injury





Surgical Staging



Port Position



Operative team



Position of Surgical Team



Operative Technique

- Dissection of Pelvic peritoneum
 Dissection of Pararectal space
 Dissection of cellulolymphatic tissue around the external iliac vessel, Obturater nerve and hypogastric artery
 Dissection o uterine artery and freeing of
- ureter
- Intra-oprative serial sampling of specimen



Complications

- Injury may occur to the bladder, bowel, ureters, pelvic vessels, and nerves.
- Deep venous thrombosis and subsequent embolism.
- Vaginal shortening, particularly if even more vagina was removed because of stage IIA disease or in the event that postoperative adjuvant radiation therapy was administered.
- Ureteral stricture and fistula.
- Bladder complications, such as overflow incontinence, urinary retention, loss of bladder sensation, and detrusor instability, occur because of bilateral disruption of parasympathetic and sympathetic nerve fibers of the bladder and ureter.
- By the third postoperative week, most patients can adequately empty the bladder.
- Vesicovaginal fistulae may occur in the postoperative period.
- Rectal dysfunction manifested by abnormal internal sphincter relaxation, decreased rectal sensation, and increased abdominal pressure required to produce a bowel movement.
- Small bowel obstruction resulting from postoperative adhesion.
- The risk of bowel complications is markedly increased with the addition of postoperative radiation therapy in addition to radical hysterectomy.

Contraindication

- Patients who are medically infirm and those who refuse surgical treatment.
- Between one third and two thirds of surgical patients require transfusion.
- As with any other surgery, careful preoperative risk assessment must be performed.
- A relative contraindication concerns the possible requirements for adjuvant radiotherapy (ie, stage IB2/IIA
- Intraoperative findings of locally advanced disease with overt parametrial involvement or grossly positive pelvic or para-aortic lymph nodes).



