

Laparoscopic hysterectomy

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Advanced Laparoscopic Surgery



Definition:

It is a minimal access surgical procedure which facilitate the removal of non prolapsed uterus through vaginal route.



Indications:

“Indications of LAVH are traditionally contraindications of Non descent vaginal hysterectomy”

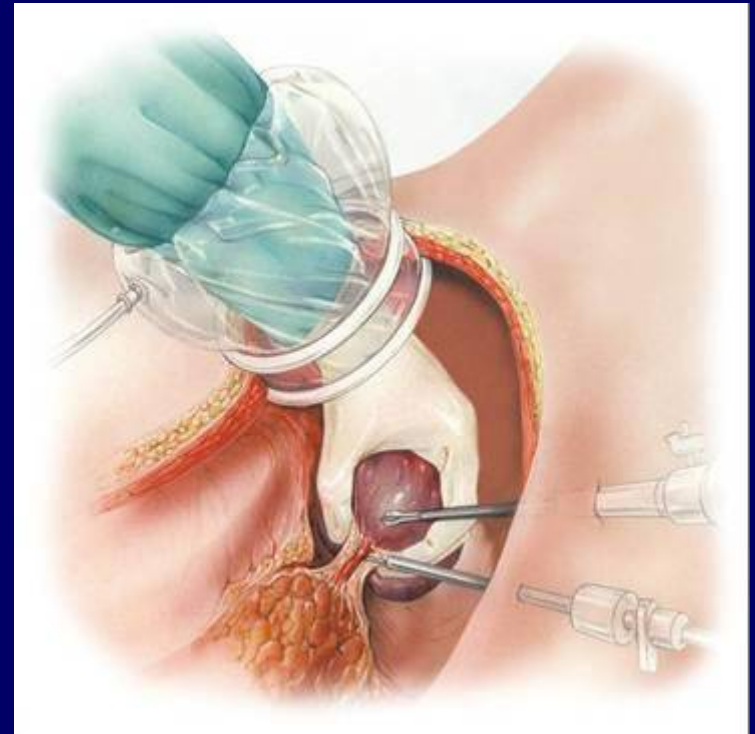
- Previous pelvic surgery
- Endometriosis
- Previous C.S.
- Pelvic pain
- Suspected adnexal pathology
- Uterine myoma
- Ectopic pregnancy
- Acute or chronic pelvic inflammatory disease
- Minimum uterine mobility & limited vaginal access

First lap hysterectomy-
Reich et al - 1989



Contraindications

- ❑ Severe COPD or Cardiac disease
- ❑ Generalised peritonitis
- ❑ Previous extensive abdominal surgery
- ❑ Hyper or Hypo coagulable states
- ❑ Uterus more than 24 week size
- ❑ Huge cervical or Broad ligament Myoma



Classification

Garry and Reich classification

- Type 1 - diagnostic lap + VH
- Type 2 - lap vault suspension + VH
- Type 3 - LAVH
- Type 4 - LH (ligation of uterine art.)
- Type 5 - TLH
- Type 6 - LSH (Supracervical hysterect)
- Type 7 – LHL (hyst+ lymphadenectomy)
- Type 8 - LHL + O (hyst+ lymphadenectomy + omentectomy)
- Type 9 - RLH (radical lap hysterect)

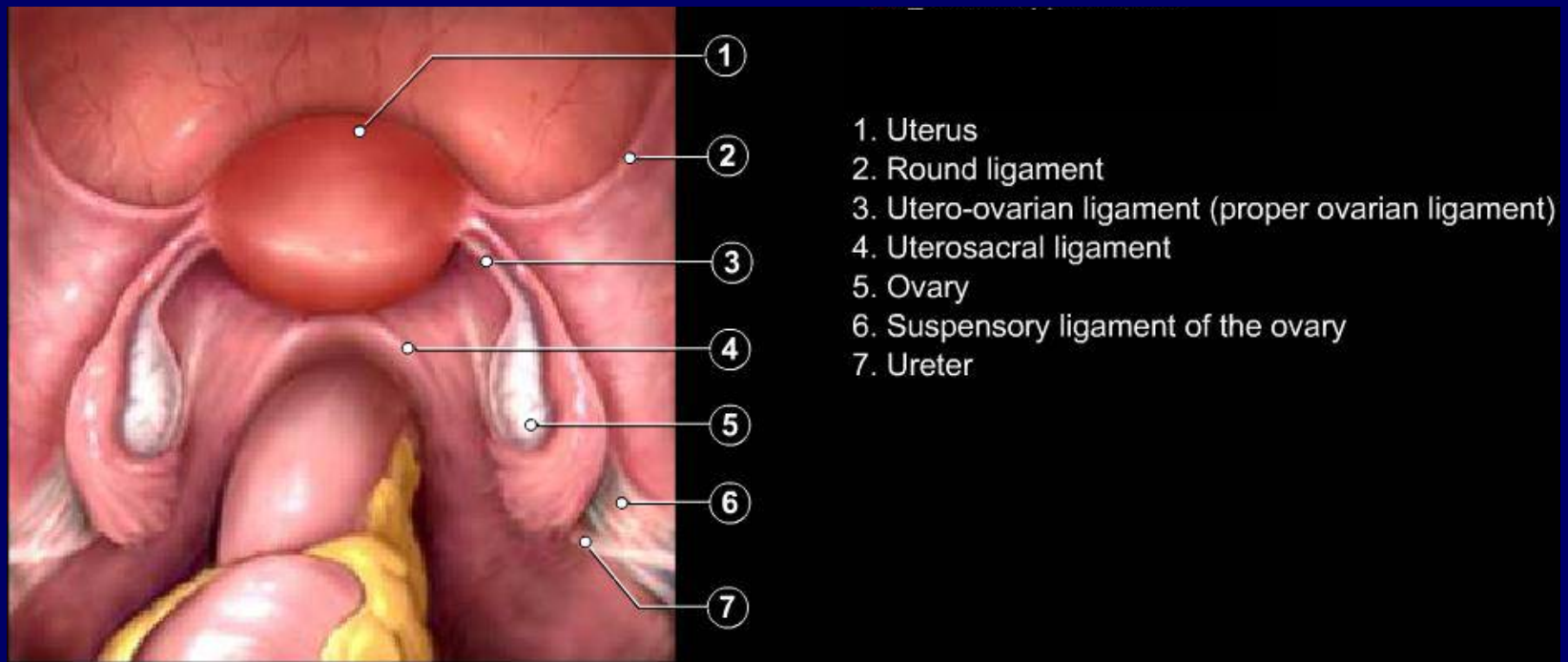


Hardware required:

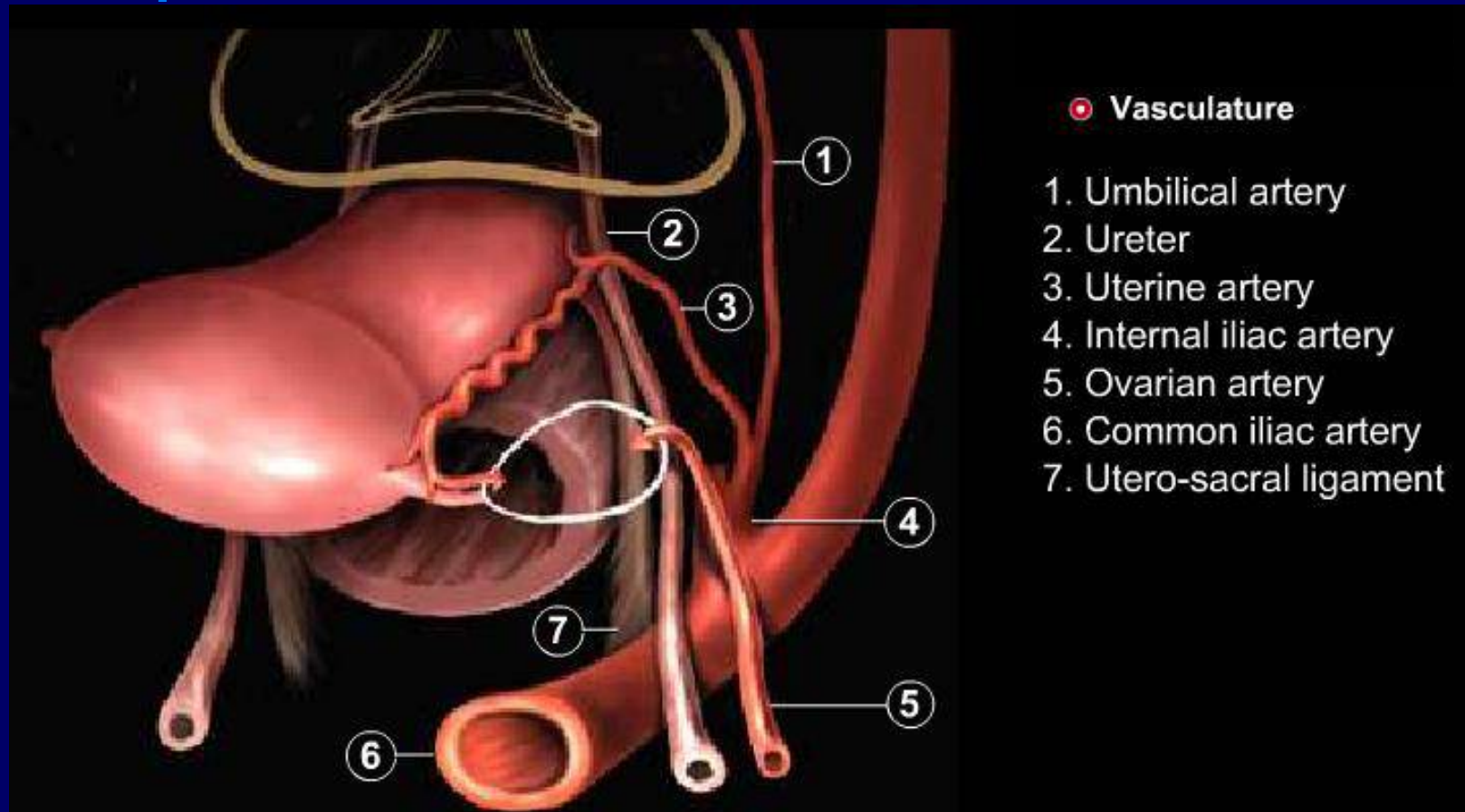
- ❑ Telescope 10mm 30 degree
- ❑ Uterine manipulator
- ❑ Grasper 5mm (2)
- ❑ Scissors 5mm Curved, Straight & hooked
- ❑ Dissectors 5 mm
- ❑ Ultrasonic dissector or Electrocautery
- ❑ Needle holders
- ❑ Laparoscopic linear stapler



Topographic Anatomy



Topographic Anatomy

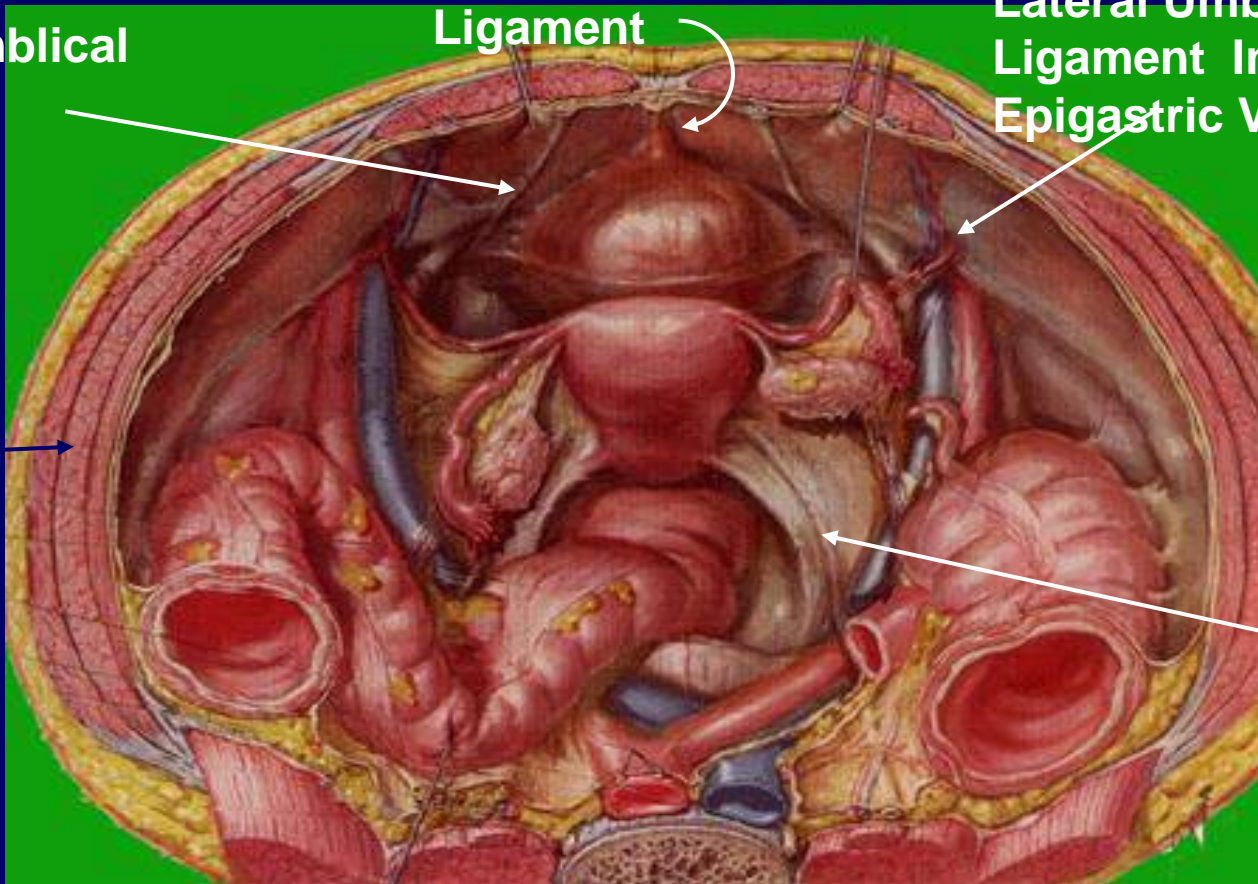


Panaromic View Pelvis

Medial Umbilical Ligament

Median Umbilical Ligament

Lateral Umbilical Ligament Inf. Epigastric V



URETER



Procedure:

- Preoperative measures:
 - Routine Anaesthetic and Medical checkups
 - Bowel preparation
 - Peglac powder - 1 sachet with water a night prior
 - Catheterization

- Patient position
 - Steep trendelenberg & Lithotomy



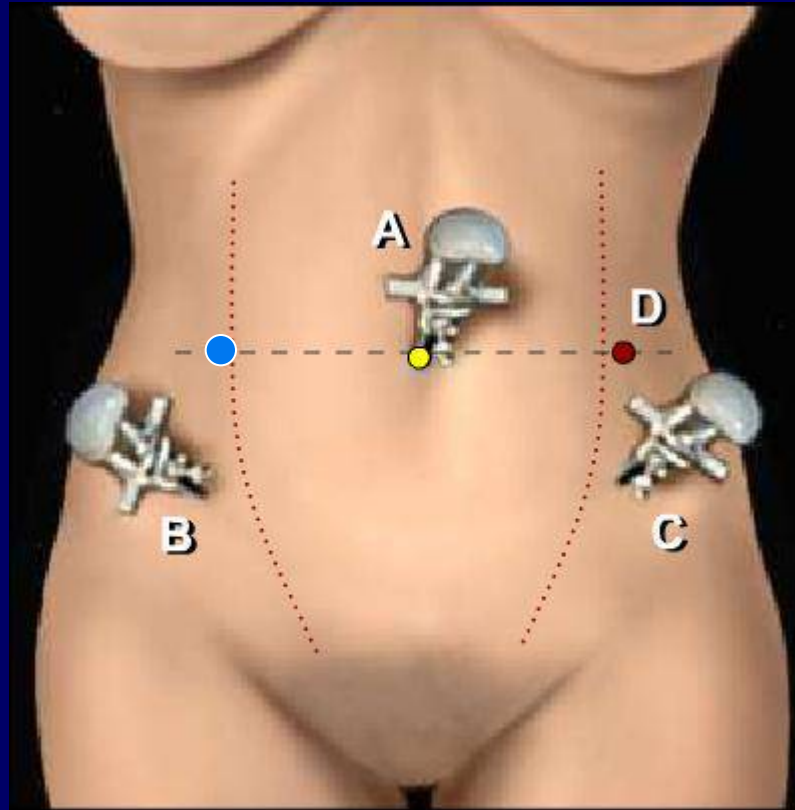
Patient Position



Position of surgical team



Port Position



Port position:

- Umbilical port for Camera
- Two 5 mm ports at 5cm away from umbilicus on either side
- Accessory port at right or left iliac region according to need



Surgical tasks:

- Creation of pneumoperitoneum
- Diagnostic laparoscopy: Pelvic side wall, ant. & Post cul-de-sac
- Elevation of uterus by the help of uterine manipulator
- Dissection
- Vaginal procedure



Uterine Manipulator



Operative procedure:

1. Elevation of Uterus
2. Successive Clamping
Desiccation and Section
of both sides

- Round ligament
- Adenexa and
- Broad Ligament up to
Uterosacral in TLH
and up to uterine in
LAVH



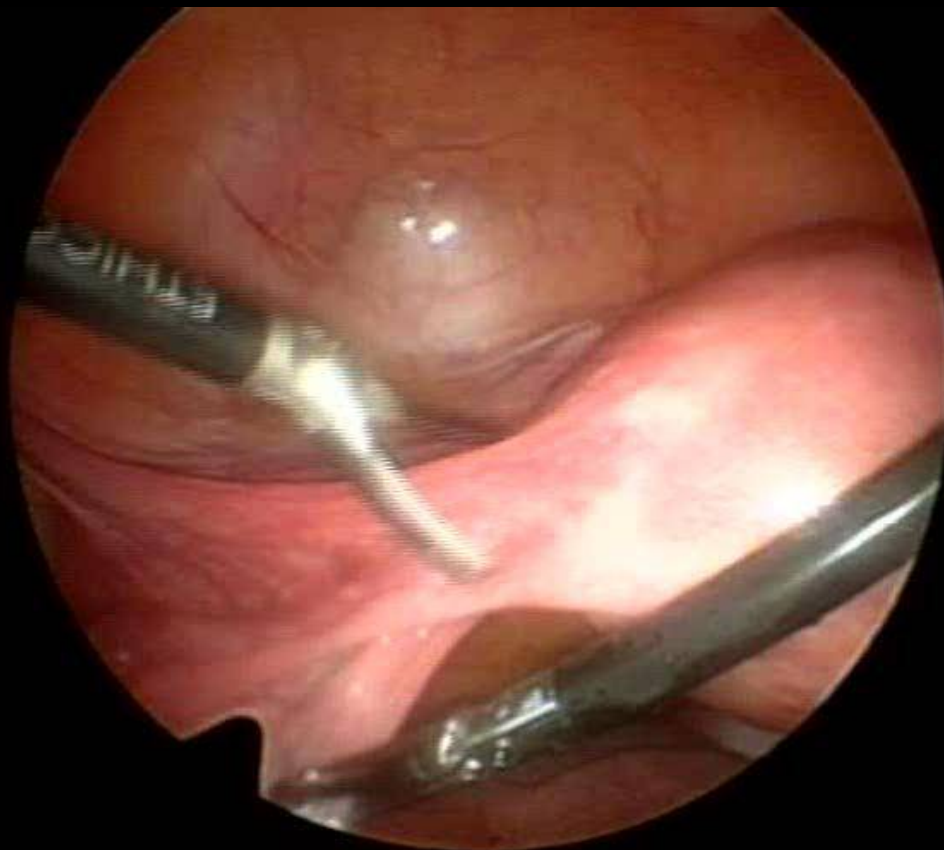




LAVH



LAVH



LAVH (Vaginal Part)



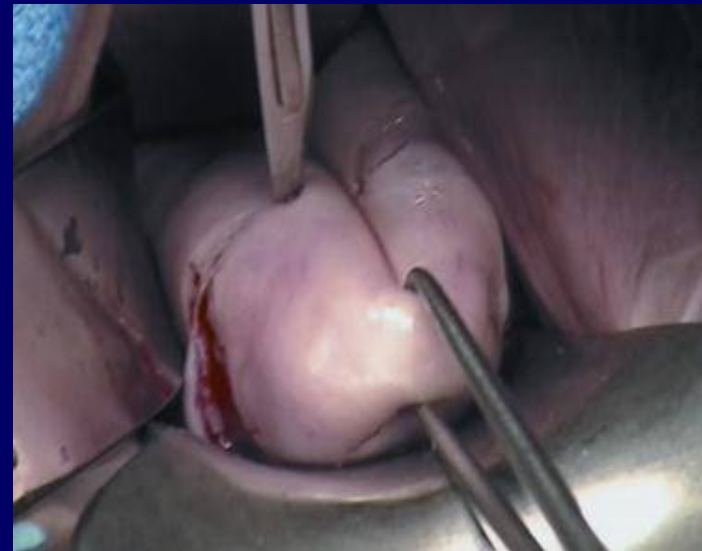
O.T. set-up for Vaginal Procedure



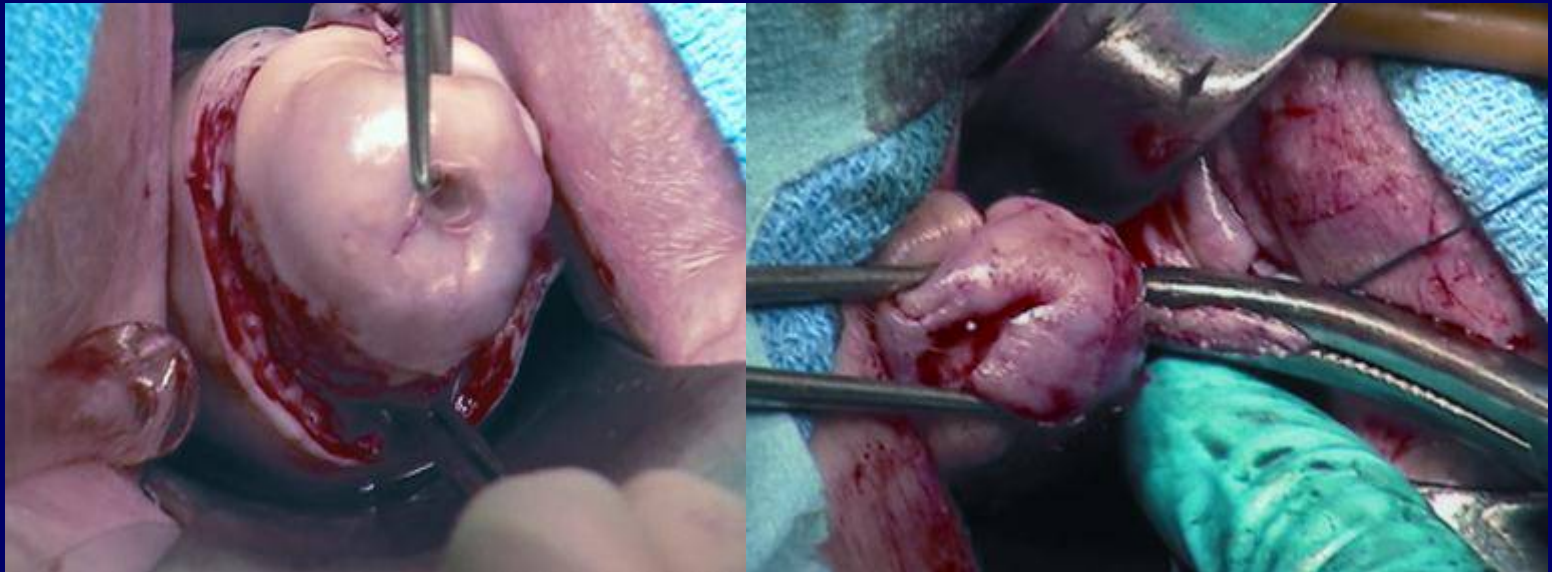


DATE
OPERATION
PT NAME
MRN
RACIAL
NEEDLES
BLADES
PLANTS
TAPER
KESSEL
LOGS
MRN

Circumcision of cervix

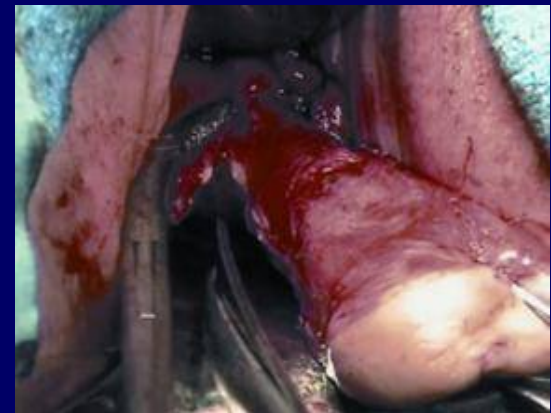
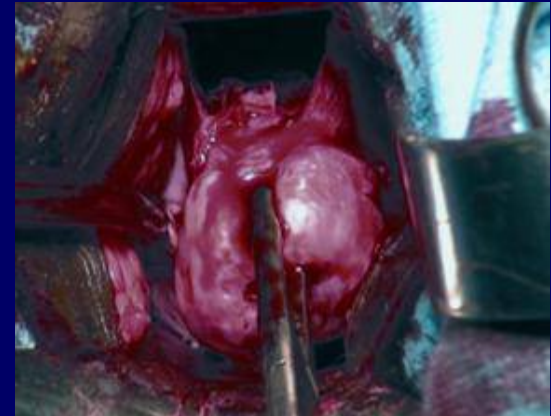


Successive clamping & Dissection

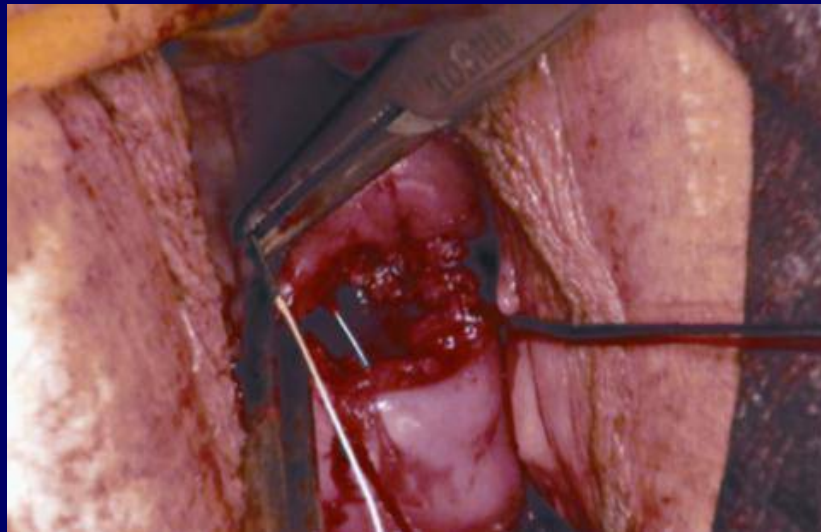


Vaginal Procedure

- Anterior peritoneum is opened & bladder is separated from uterus
- Retractor is placed into the bladder peritoneum
- Successive dissection around the cervix is performed until the proximal point of dissection that was performed laparoscopically is reached



Closure of vault



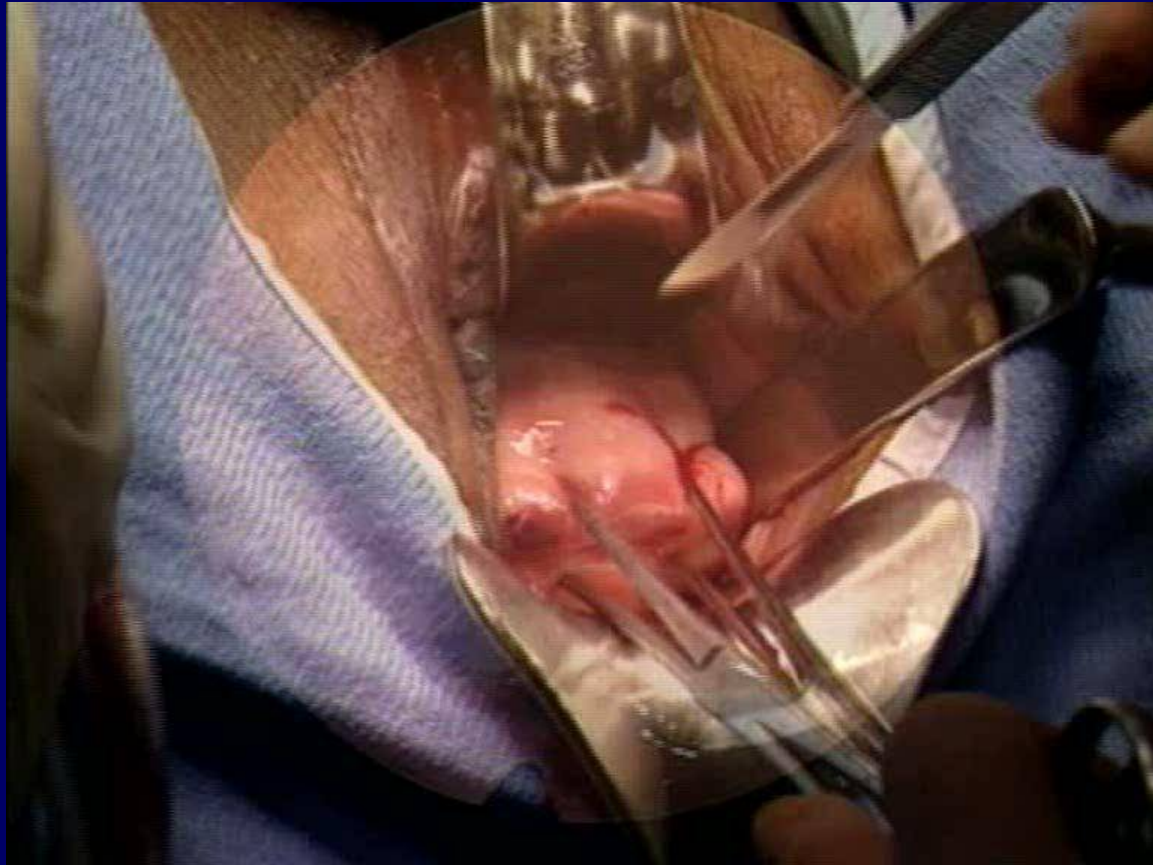
Vaginal wall is sutured horizontally in one layer



Vaginal Part of LAVH



Vaginal Part of LAVH





NDVH

Procedure: Vaginal Hysterectomy

Patient: 42 year old female

Gravitis zero

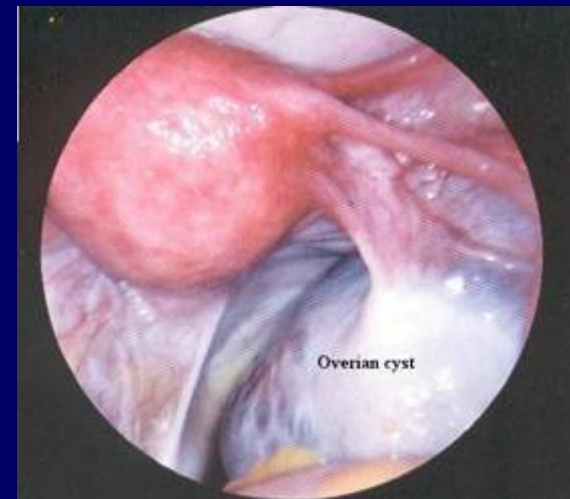
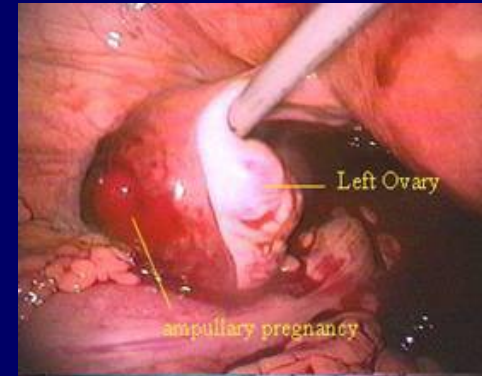
Presented with:

3 month history of
symptomatic vaginal bulge



Advantage of LAVH

- ❑ Less postoperative pain
- ❑ Early recovery
- ❑ Minimal hospital stay
- ❑ Thorough diagnosis
- ❑ More complete excision than vaginal hysterectomy
- ❑ Reduced incidence of bladder and rectal injury
- ❑ Economical
- ❑ Cosmetically better outcome



Disadvantage

- Ureter injury is more in TLH then LAVH
- Normally the rate of ureteral injury in abdominal hysterectomies is 1-2%. In TLH, the injury rate was 4.3%.
- In LAVH 1%
- All the risk factors of Laparoscopy and general anaesthesia is always there especially in inexperienced hand.



Tamussino KE, Lang PEJ, Breinl E: Ureteral complications with operative gynecologic laparoscopy. Am J Obstet Gynecol 1998;178:967-70





THANK you



*Be not afraid of growing slowly,
Be afraid only of standing still*



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