Laparoscopic hysterectomy

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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

1. Uterus
2. Round ligament
3. Utero-ovarian ligament (proper ovarian ligament)
4. Uterosacral ligament
5. Ovary
6. Suspensory ligament of the ovary
7. Ureter
Topographic Anatomy

Vasculature
1. Umbilical artery
2. Ureter
3. Uterine artery
4. Internal iliac artery
5. Ovarian artery
6. Common iliac artery
7. Utero-sacral ligament
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 Utersacral in TLH and up to uterine in LAVH
LAVH
LAVH (Vaginal Part)
O.T. set-up for Vaginal Procedure
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
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 than 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.

THANK you

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

World Laparoscopy Hospital
Advanced Laparoscopic Surgery