

# 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"

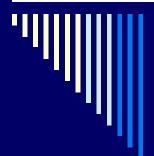
- Previous pelvic surgery
- Endometriosis
- •Previous C.S.
- Pelvic pain
- Suspected adnexal pathology
- Uterine myoma
- Ectopic pregnancy
- Acute or chronic pelvic inflammatory disease
- Minimum uterine mobility & limited vaginal access











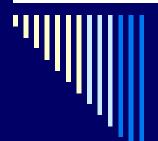
#### Contraindications

- 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



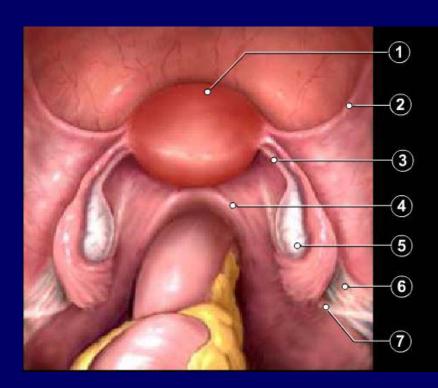








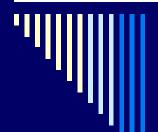
## **Topographic Anatomy**



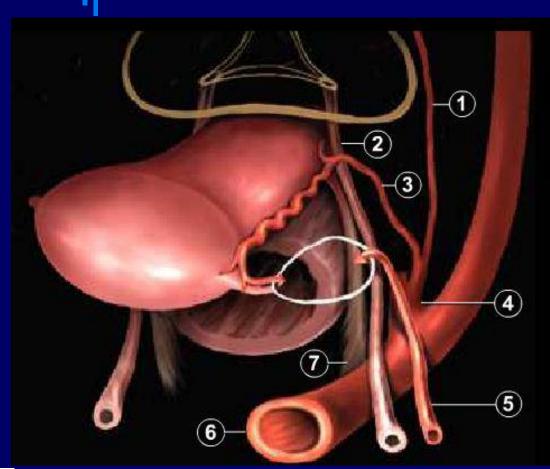
- 1. Uterus
- 2. Round ligament
- 3. Utero-ovarian ligament (proper ovarian ligament)
- 4. Uterosacral ligament
- 5. Ovary
- 6. Suspensory ligament of the ovary
- 7. Ureter







### **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







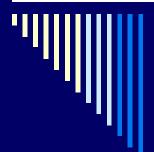
#### **Panaromic View Pelvis**

Medial Umblical Ligament

**Median Umblical Lateral Umblical** Ligament 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









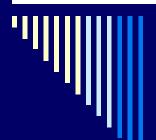
# Position of surgical team











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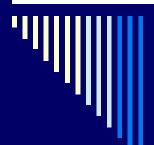
# Port position:











# Uterine Manipulator









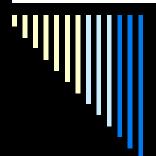
# Operative procedure:











# TLH Procedure





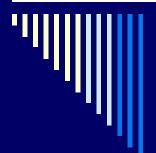




# TLH Advantage using CF Uterine Manipulator

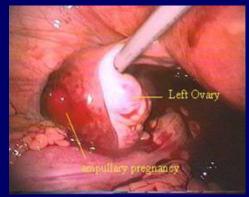


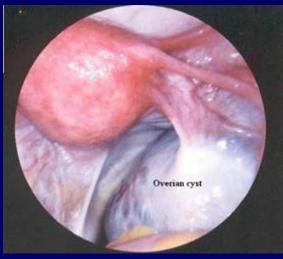




#### Advantage of TLH

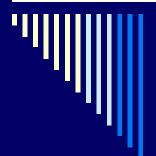
- Less postoperative pain
- Early recovery
- Minimal hospital stay
- Thorough diagnosis
- More complete excision than vaginal hysterectomy
- Reduced incidence of bladder and rectal injury
- Less chance of Vault Prolapse











#### 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







# TLH in Difficult Cases







