

# Laparoscopic Tubal Surgery

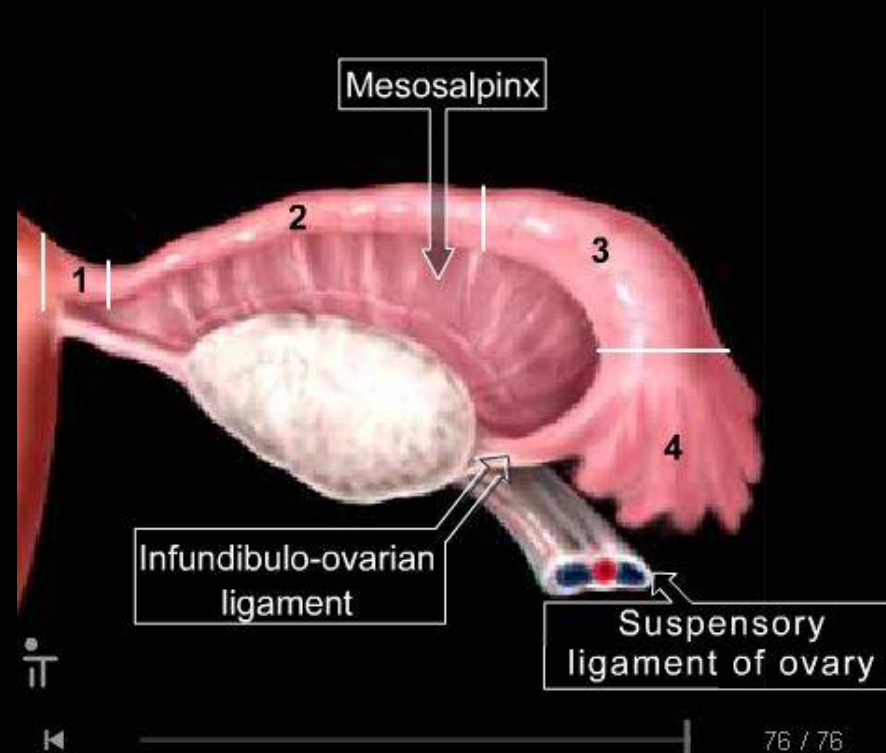
**R. K. Mishra**



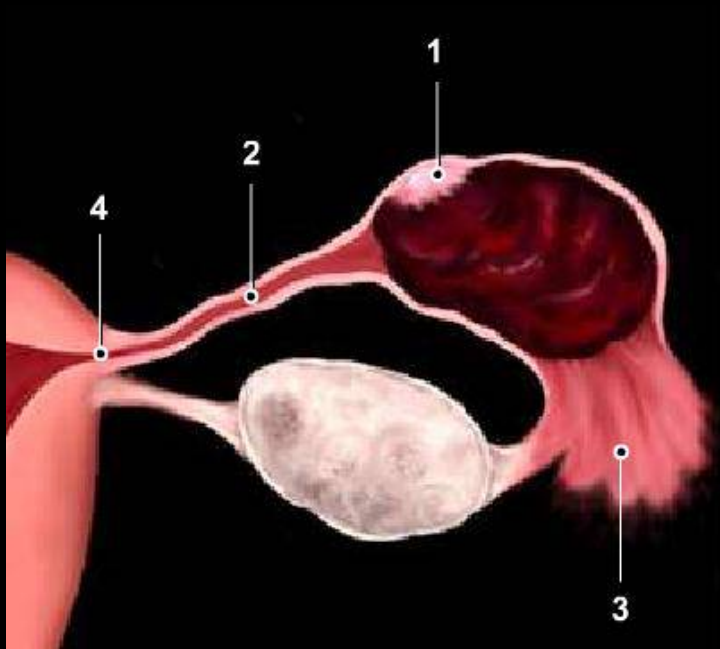
# Topographic Anatomy

The uterine tube is made up of 4 segments:

1. Interstitial or intramural junction
2. Isthmus
3. Ampulla
4. Infundibulum



# Topographic Anatomy



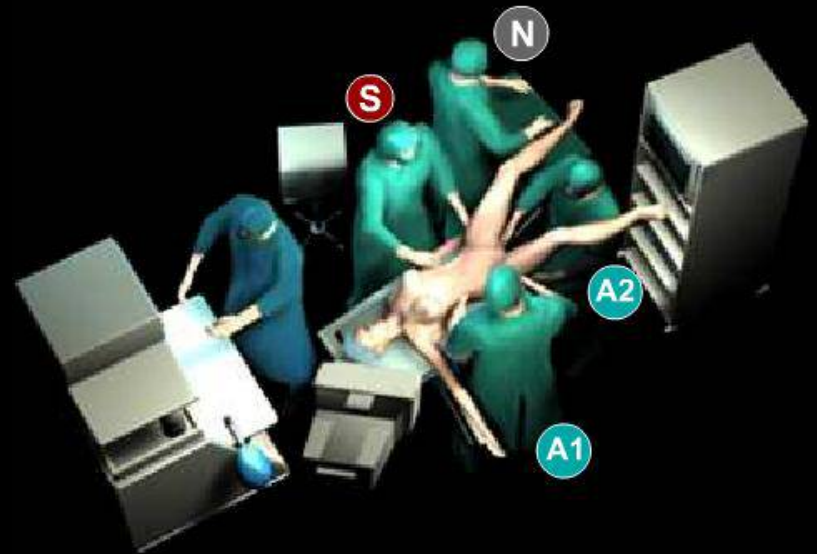
Ectopic pregnancy (EP) usually occurs (99% of cases) in the uterine tube (Philippe, 1970). It can be found in:

1. the ampulla (64%);
2. the isthmus (25%);
3. the infundibulum (9%);
4. the intramural junction (2%).

The other localizations are less common: ovarian (0.5%); cervical (0.4%); abdominal (0.1%); intraligamentary (0.05%).



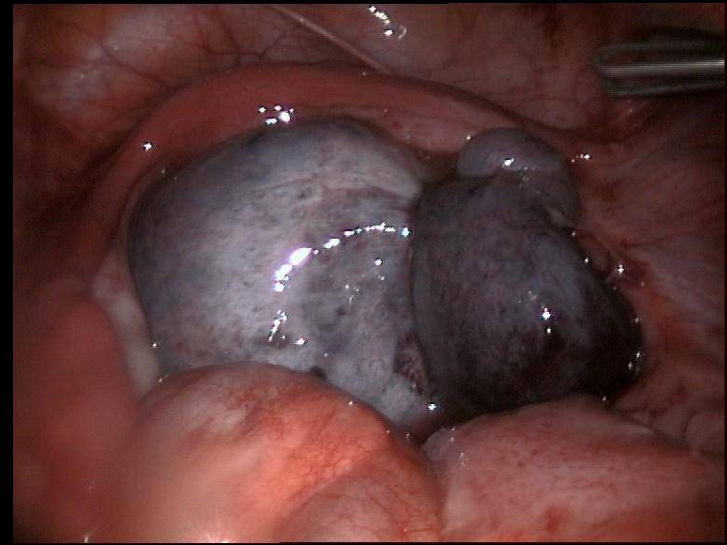
# O.T. Setup



# Patient and Port Position



# Port Position



# Position of Surgical Team





# Salpingotomy vs Salpingectomy

Previous history	Laparoscopy
EP:2	Ipsilateral adhesions: 1
Adhesiolysis	Contralateral adhesions: 1
Tubal microsurgery: 2	
Unique tube: 2	
Salpingitis: 1	

Score 1-3: conservative treatment

Score = 4: salpingectomy

Score >4: salpingectomy with contralateral tuba ligation

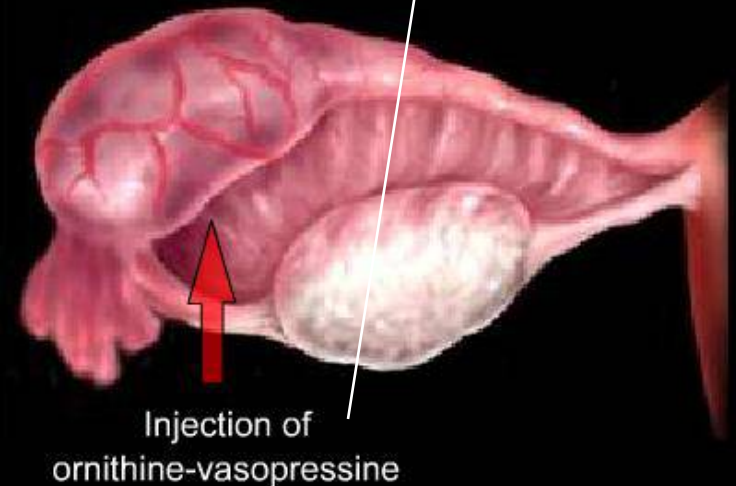
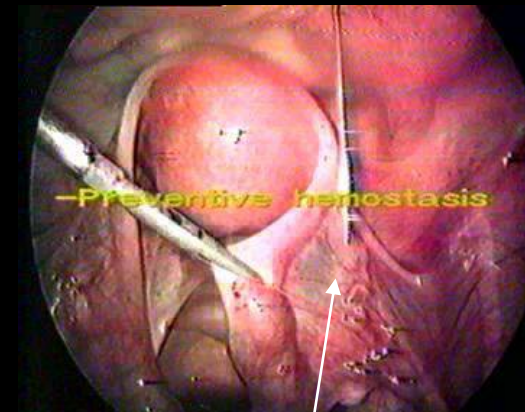
Pouly et al.



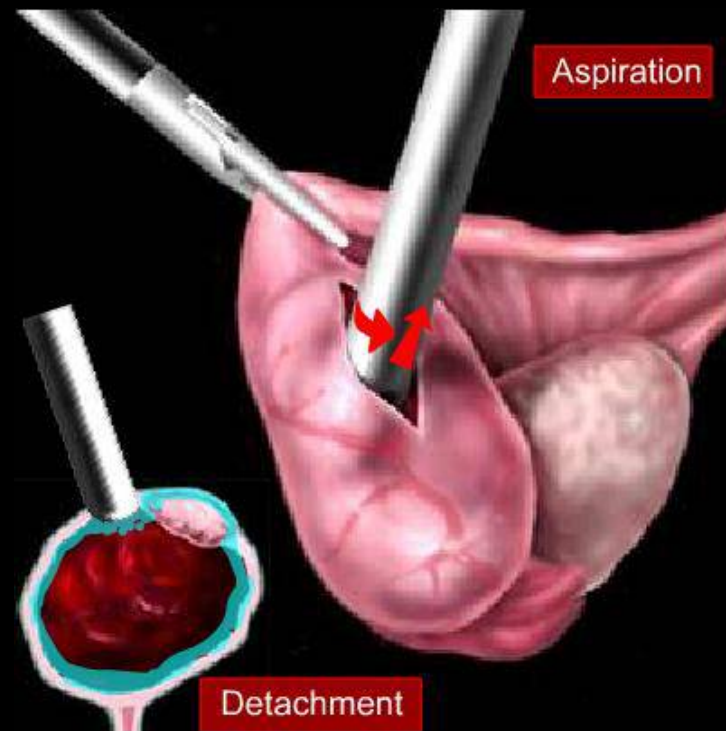
# Salpingotomy

## □ Preventive haemostasis

- Dissolve 5 I.U. of vasopressin in 20 ml of Saline
- Injection of vasopressin in Mesosalpinx result into transient ischemia and will provide a bloodless field

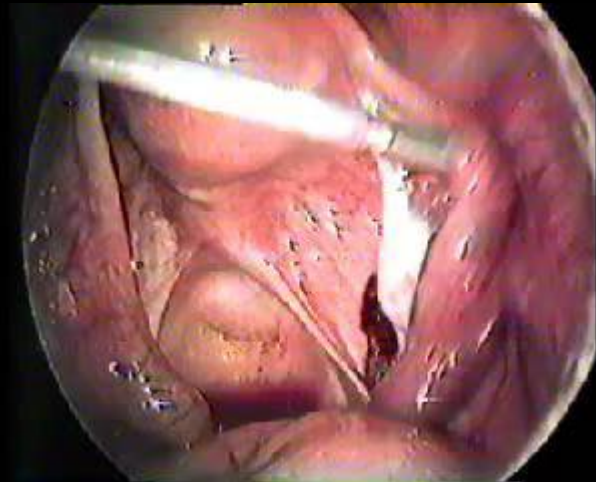


# Salpingotomy



# Salpingotomy

- 10 -15 mm incision at anti mesenteric border of fallopian tube
- Aspirate trophoblast with mild suction using suction irrigation instrument



Salpingotomy for  
Tubal Pregnancy





# Contraindication of conservative treatment

## □ Absolute:

- > 6 cm in diameter
- HCG level 15000 I.U/ ml

## □ Relative

- Cases with poor pregnancy prognosis
- Severe adhesion

**Weekly HCG essay should made until undetected**



# Salpingectomy



The main risk of laparoscopic salpingectomy is devascularization of the ovary. It is essential to remain close to the tube, and at a distance from the ovarian vessels and the suspensory ligament of the ovary.



# Medial to Lateral Dissection



# Identification of Ureter



# Salpingectomy

- Dissection starts at uterine end of fallopian tube
- Mesosalpinx is progressively coagulated & sectioned.
- Suturing or Bipolar electro surgery is the safest choice





# Salpingectomy

LAPAROSCOPIC  
SALPINGECTOMY  
RIGHT ECTOPIC



# Tubal cyst two port technique



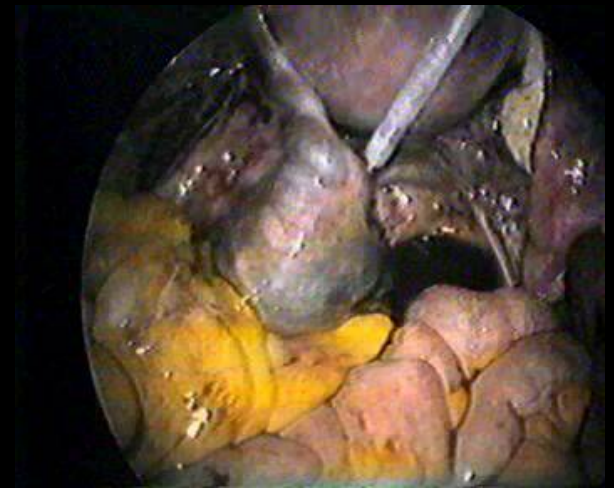
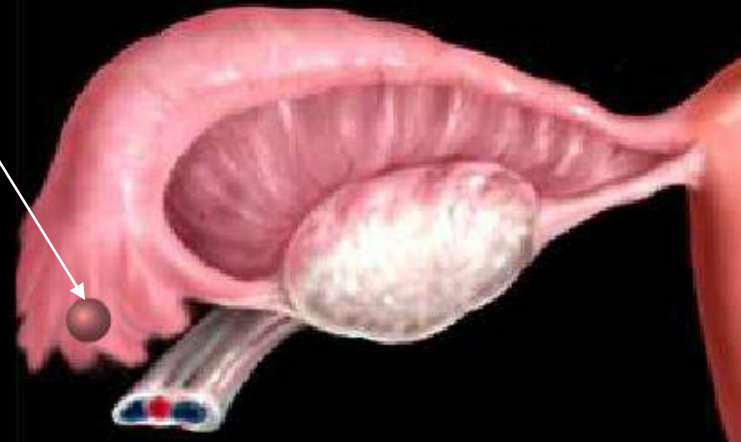
# Salpingo-oophorectomy in Special Cases

- Haematoma due to Large ruptured Ectopic should be aspirated before starting dissection
- If there is more than 1500cc haemoperitoneum laparoscopic approach is contraindicated
- Heparinized saline should be used in cases of large haematoma



# Infundibular Ectopic

This is the only site where it is not necessary to incise the tube. The trophoblast is aspirated. The infundibulum of the uterine tube is washed; hemostasis using a bipolar grasper is often useful.





# Salpingo-Ovariolysis

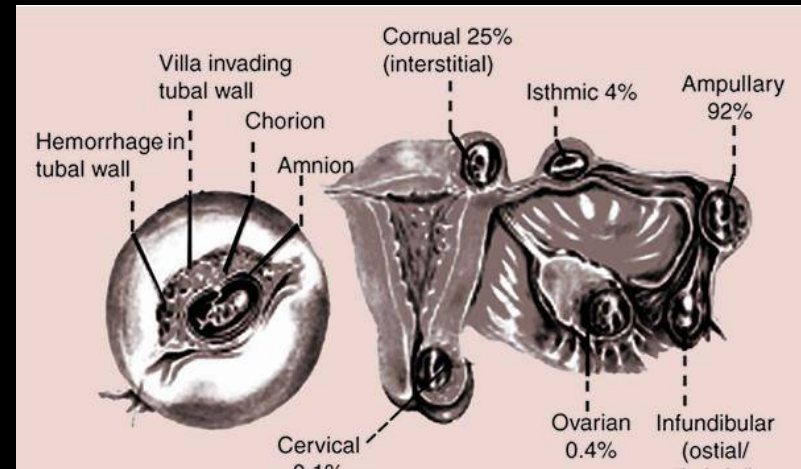


Laparoscopic  
Salpingo-ovariolysis



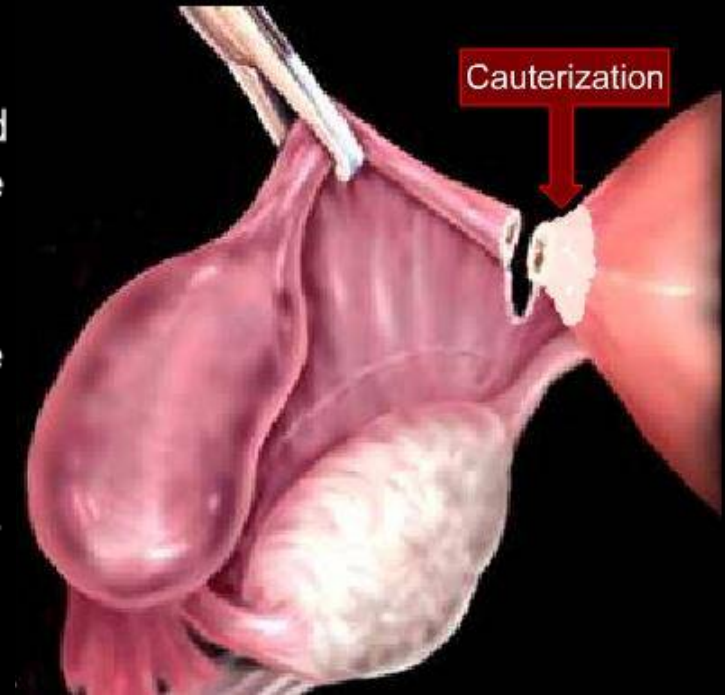
# Contraindication of laparoscopic approach

- Absolute:
  - Shock
  - Interstitial pregnancy
- Relative
  - Obesity
  - Severe adhesion
  - Large haemoperitoneum



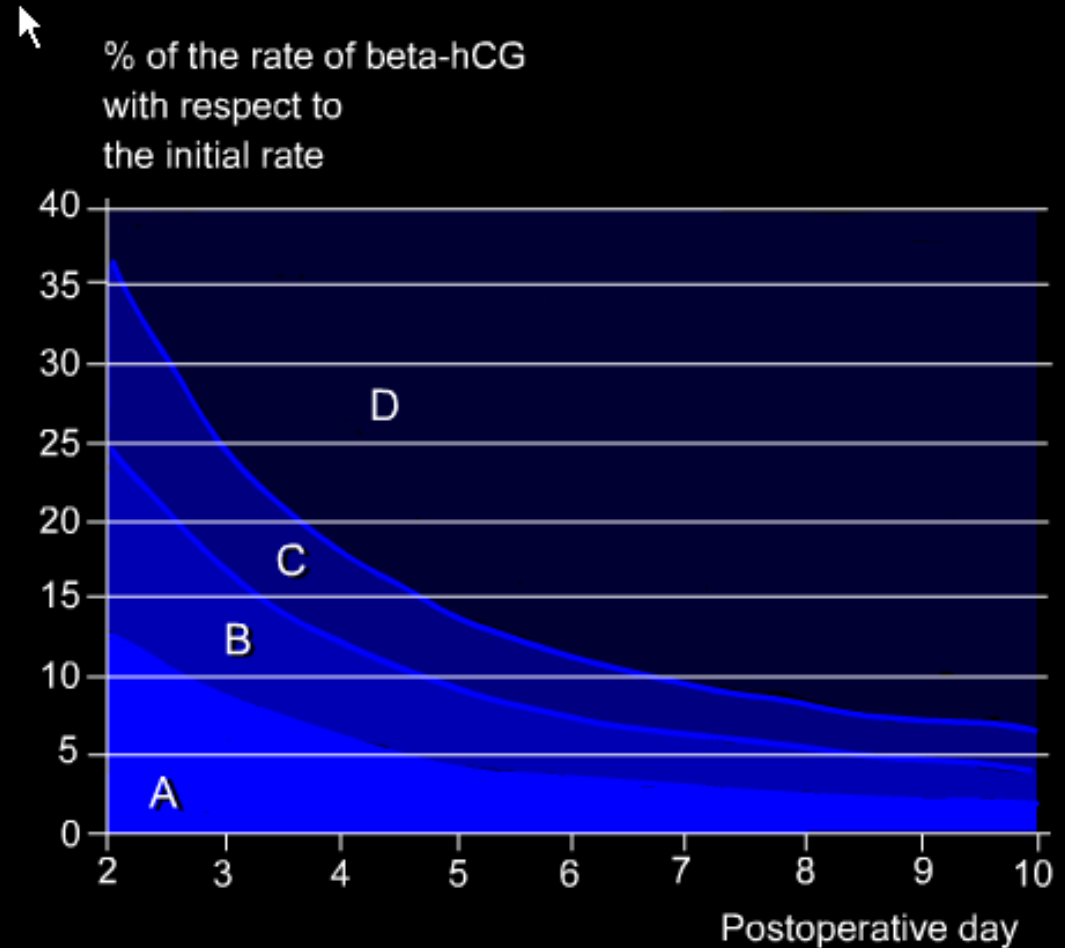
# Complications

Precautions must be taken to avoid a pathology caused by the tubal stump (endometriosis). The stump must be cauterized over a few millimeters to avoid patency from being re-established spontaneously and a utero-peritoneal fistula from forming. This technique limits the risk of subsequent EP from occurring in the intramural portion of the tube or in the remaining stump. In cases of dense tubo-ovarian adhesions, a part of the tubal wall may sometimes be left on the ovary to avoid its devascularization.

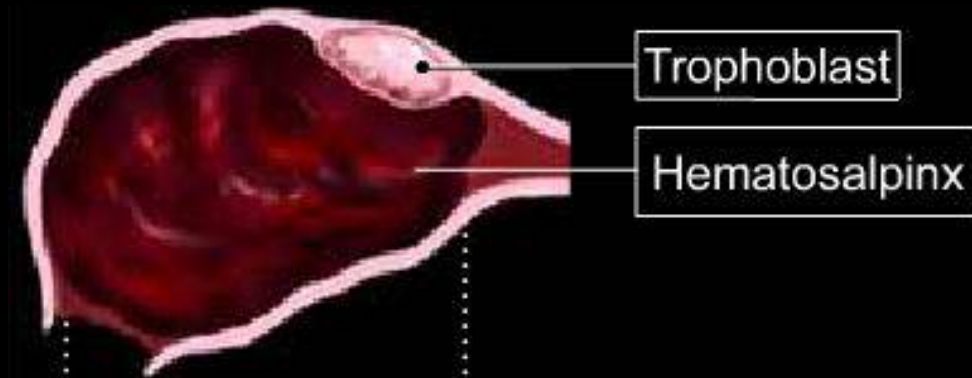


# Post-Operative follow-up

A= Guaranteed  
B= Monitoring Until undetected  
C= Strict Monitoring  
D= Failure



# Failure



To treat failures, either a 50 mg/m<sup>2</sup> dosage of Methotrexate is administered, or laparoscopic salpingectomy is performed.

Hysterosalpingography may be performed 3 months after the procedure to assess tubal patency.

If the patient's blood group is Rh negative, an injection of anti-D gammaglobulins is necessary within 72 hours after an EP is detected to prevent anti-D alloimmunization.





# Thank You



Prof. Mishra at Iranian Hospital Dubai

