

# OVARIES

## Female gonads

- **Situation :**

- Lies in the ovarian fossa on the lateral pelvic wall
- Ovarian fossa bounded
  1. Anteriorly – obliterated umbilical artery
  2. Posteriorly – ureter & internal iliac artery

- **Position :**

- Variable
- **Nulliparous women –**
  - Long axis is nearly vertical
  - described as upper and lower pole
- **Multiparous women –**
  - Long axis becomes horizontal
  - upper pole points laterally and lower pole medially

- **External features :**

1. Young girls, before the onset of ovulation,  
Smooth surface which are  
greyish pink in colour
2. After puberty, surface become uneven  
colour changes from pink to  
Gray
  - two pole 1. upper or tubal pole  
2. lower or uterine pole
  - two border 1. anterior or mesovarian  
2. posterior or free
  - two surfaces 1. lateral  
2. medial

- **Relation :**

1. **peritoneal relations,**

- entirely covered with peritoneum
- ovary is connected to the posterior layer of the Broad ligament by a short fold of peritoneum,

Called mesovarium

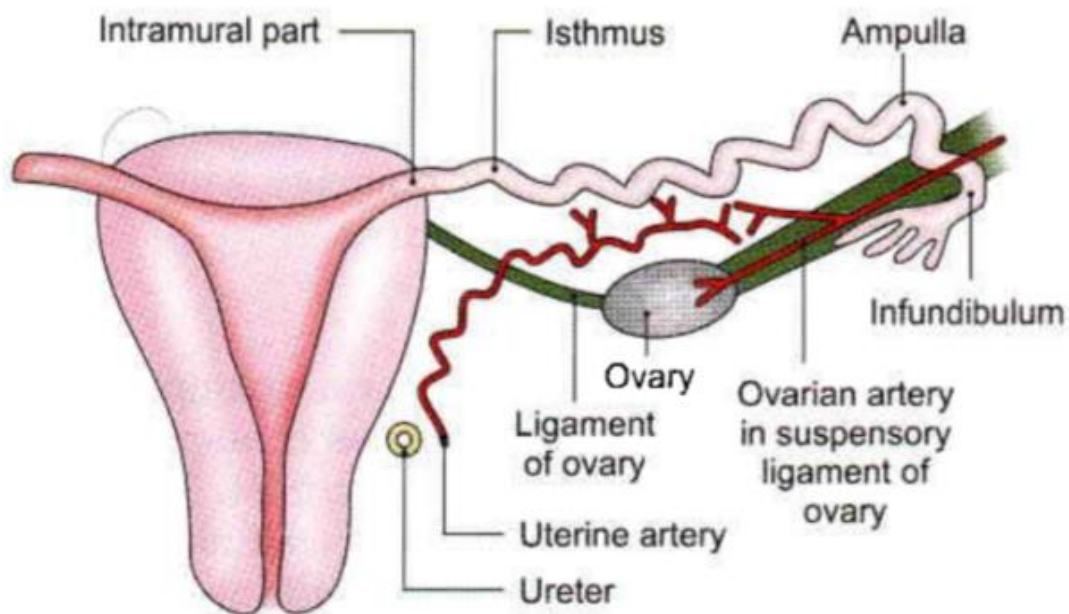
## 2. visceral relations,

- upper pole: uterine tube & external iliac vein
- lower pole: ligament of the ovary, to lateral

Angle of uterus

- posteroinferior attachment of the uterine tube
- ligament lies between two layers Of broad ligament of uterus & Smooth muscle fibres

- anterior border: uterine tube, obliterated umbilical artery
- posterior border: convex
  - uterine tube and ureter
- lateral surface: ovarian fossa which lined by parietal peritoneum
- medial surface: uterine tube
  - peritoneal recess between the mesosalpix and this surface known as ovarian bursa



\*Lower pole & lateral surface not related to uterine tube

\*Two borders , upper pole & medial surface  
Are related to uterine tube

● **Arterial supply:**

1. Ovarian artery
2. Uterine artery

- **Venous drainage:**

- Hilus and form a pampiniform plexus around the artery

- the vein ascends on the posterior abdominal wall and drains in the IVC on right side and left renal vein on left side

- **Lymphatic drainage:**

- Lateral aortic node
  - Preaortic node

- **Nerve supply:**

- Sympathetic - T10,T11
    - vasomotor
  - Parasympathetic - S2,S3,S4
    - vasodilator

- **Functions:**

1. Production of oocyte:
  - during reproductive life of about 30 year ovaries produce alternately one secondary

oocyte per month

-liberation of oocyte from the ovary is called ovulation. It occurs on or about the 14<sup>th</sup> day of the 28 day menstrual cycle.

2. Production of hormones:

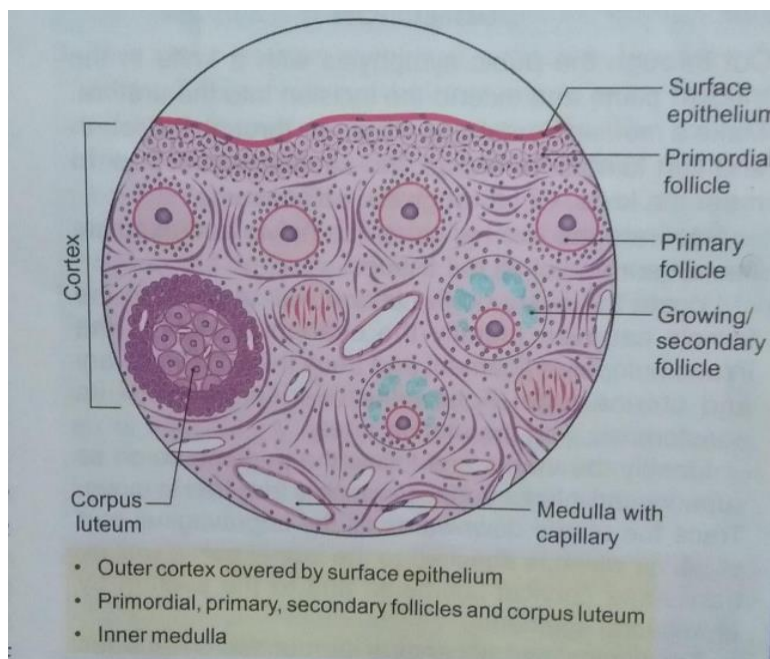
-oestrogen

-progesterone

• **Histology:**

1. Primary follicle

2. Growing / secondary follicle



- **Clinical anatomy:**

1. Determination of ovulation
2. Prolapse of ovaries
3. Ovarian cyst
4. Carcinoma of ovary
5. Chocolate cyst