

FALLOPIAN TUBE (Synonyms: Uterine tube, oviduct)

The uterine tubes are paired structures, measuring about 10 cm and are situated in the medial three-fourths of the upper free margin of the broad ligament. Each tube has got two openings, one communicating with the lateral angle of the uterine cavity called uterine opening and measures 1 mm in diameter, the other is on the lateral end of the tube called pelvic opening or abdominal ostium and measures about 2 mm in diameter.

PARTS: There are four parts. From medial to lateral are- (1) Intramural or interstitial lying in the uterine wall and measures 1.25 cm in length and 1 mm in diameter, (2) Isthmus- almost straight and measures about 3-4 cm in length and 2 mm in diameter, (3) Ampulla- the tube part and measures about 5 cm in length which ends in, (4) wide infundibulum measuring about 1.25 cm long with a maximum diameter of 6 mm. The abdominal ostium is surrounded by a number of radiating fimbriae (20-25), one of these is longer than the rest and is attached to the outer pole of the ovary called ovarian fimbria (Fig. 1.7).

STRUCTURES: It consists of three layers- (1) Serosa: consists of peritoneum on all sides except along the line of attachment of mesosalpinx, (2) Muscular: arranged in two layers outer longitudinal and inner circular, (3) Mucous membrane has three different cell types and is thrown into longitudinal folds. The epithelium rests on a delicate vascular reticulum of connective tissue. Mucous membrane is lined by:

(i) Columnar ciliated epithelial cells that are most predominant near the ovarian end of the tube. These cells compose 25% of the mucosal cells, (ii) Secretory columnar cells are present at the isthmic segment and compose 60% of epithelial cells, (iii) Peg cells are found in between the above two cells. They are the variant of secretory cells.

FUNCTIONS: The important functions of the tubes are- (1) Transport of the gametes, (2) To facilitate fertilization and survival of zygote through its secretion.

BLOOD SUPPLY: Arterial supply is from the uterine and ovarian. Venous drainage is through the parametrial plexus into the ovarian veins.

LYMPHATICS: The lymphatics run along the ovarian vessels to para-aortic nodes.