

Female Reproductive System Histology

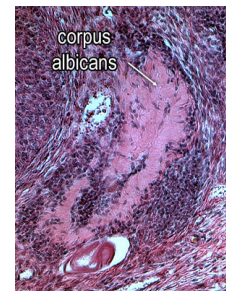
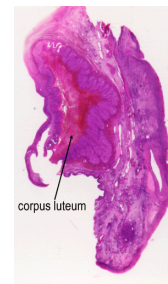
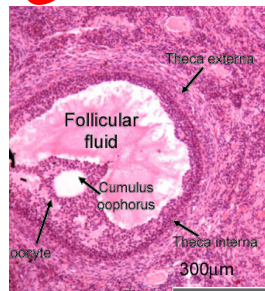
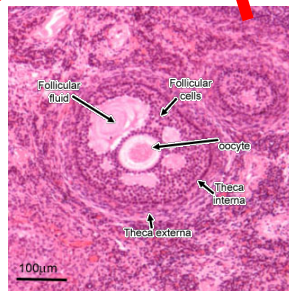
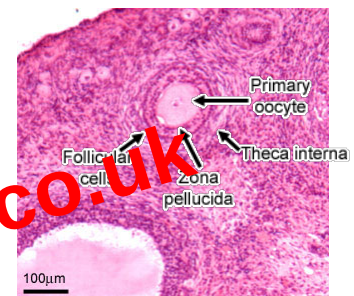
OVARIES

- oogenesis is stimulated by gonadotrophin from anterior pituitary gland
- release oestrogen and progesterone
- covered by tunica albuginea = thick connective tissue
- tunica albuginea is covered by simple squamous mesothelium = germinal epithelium
- coiled arteries = helicine arteries
- oocytes are surrounded by epithelial cells and clumped together, form follicles

OOCYTES



- **primordial follicles** are present at birth, surrounded by single layer of ovarian follicular epithelial cells/ granulosa cells, found round edge of cortex
- **primary follicles** are surrounded by two layers of granulosa cells which continue to hypertrophy and make more cells, zona pellucida forms = glycoprotein layer between oocyte and zona pellucida



- **secondary follicles** have more layers of granulosa cells = cumulus oophorus and pockets of follicular fluid which will join together to form an antrum, theca splits into 2 layers interna = round cells which secrete fluid + externa = spindle shaped cells
- **graffian/ tertiary follicles** = main cytoplasm + polar body, follicular fluid forms one antrum surrounded by follicular cells = membrane granulosa