

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2011 – Female Reproductive Tract

Repro3: This is a composite of 3 cysts in bovine ovaries. You should know that the section closest to the slide label is a cyst < 2.5 cm and it has a stigma (evidence of ovulation).

Ovary: The cyst has an internal, attenuated mesothelial-like lining on a thin layer of organized fibrocytes and collagen. Deeper is a zone of typical mature small luteal cells with a normal sinusoidal network with a few lymphocytes and macrophages. Moving further toward the ovarian cortex are layers of normal ovarian stroma that include occasional islands of sex cord remnants. The ovarian surface has a nonreactive mesothelium.

MDx: Ovary: Cystic corpora luteum (These will never “fill in” with luteal tissue – as some claim, and are not associated with a fertile cycle)

Middle section: This is a thin-walled cyst ~2.5cm in diameter.

Ovary: The inner lining of the cyst is lined by a layer of tall epithelium that has ample eosinophilic cytoplasm with nuclei pushed apically. The lining is in folds and pseudorosettes (granulosa cells). The epithelium is on a thin vascularized stroma of spindle cells (theca). The remaining wall is a fibrous stroma with many vessels and a nonreactive mesothelium.

MDx: Ovary: Normal Graafian follicle (note that these contract to give the impression of folds and pseudorosettes that some call “Call-Exner bodies”).

Last section is from a cyst >7cm.

Ovary: The inner wall is a simple cuboidal lining on a vascularized stroma of spindle cells. The remaining wall consists of ovarian stroma with many vessels, islands of sex cords and occasional small antral follicle with degenerating epithelium (atretic follicle), and in some sections, oocytes in primary non-antral follicles. The mesothelium is non reactive.

Mdx: cystic Graafian follicle.