



# ECVP/ESVP Summer School in Veterinary Pathology

## Summer School 2011 – Female Reproductive Tract

Repro4: two pieces of tissue from 2 large, bovine ovaries (10cm+ diameter)

One section is rectangular and has an ovarian capsule on one edge. The remainder has a homogenous population of neoplastic granulosa cells subtended by a fine fibrovascular stroma. The neoplastic cells are long columnar, spindlyoid or tear-drop shaped with a grey homogeneous and rarely finely vacuolated. The cells line up on the stroma and palisade sometimes seeming to span between stroma bands. Nuclei are hyperchromatic with a prominent nucleolus and the mitotic index is <1/hpf. Occasionally eosinophils infiltrate the stroma.

The second section is a polygonal section of ovary with one capsular border. This neoplastic process is a proliferation of a homogeneous population of cells piling up a thin fibrovascular stroma and forming variably sized cysts containing proteinaceous fluid. Neoplastic cells are cuboidal with a finely vacuolated cytoplasm and an ovoid hyperchromatic nucleus with variably stippled chromatin clumps. The mitotic index is <1/hpf.

MDx: Ovary: granulosa cell tumor. These neoplasms are common in old cows and rarely malignant. These are commonly bilateral and most commonly are solid. Sometimes are here, you will see poly-cavitated neoplasms more typical of this neoplasm in mares.