



NTP Nonneoplastic Lesion Atlas

Ovary, Follicle – Cyst

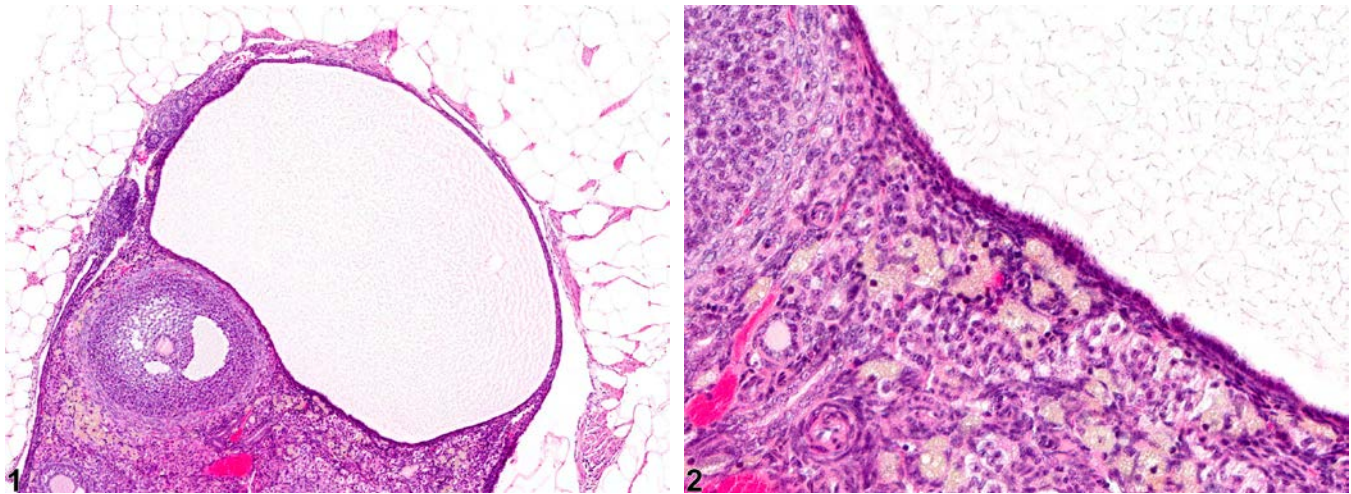
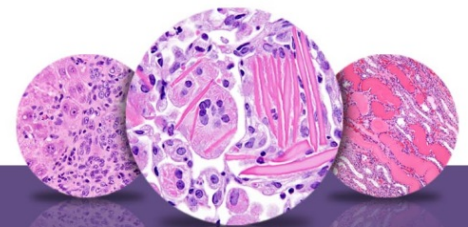


Figure Legend: **Figure 1** Ovary, Follicle - Cyst in a female B6C3F1/N mouse from a chronic study. A large ovarian follicular cyst appears as a distended fluid-filled space lacking an oocyte. **Figure 2** Ovary, Follicle - Cyst in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). The cyst wall is lined by one to two layers of cuboidal or flattened granulosa cells.

Comment: Ovarian follicular cysts are common aging findings in rats and mice. They arise in secondary follicles that fail to ovulate. They vary in size but are larger than a normal preovulatory follicle and may be single or multiple, unilateral or bilateral. Their numbers usually increase with aging. They have also been induced by chemicals that modify cyclical ovarian activity. They may be associated with persistent estrus, cystic endometrial hyperplasia, and infertility. Histologically these cysts are thin walled and filled with pale acidophilic residue or blood; they may contain cell debris, degenerating oocytes, or foamy, vacuolated, or pigment-laden macrophages. These follicles are lined by one to four layers of cuboidal granulosa cells, and there is no luteinization. Some larger cysts may be lined by a single layer of flattened cells resting on a thin fibrous capsule.

Recommendation: Ovarian follicular cysts should be diagnosed, but cysts occurring as background lesions need not be graded. In the case of a follicular cyst, the diagnosis should include the type of cyst/location as a modifier (i.e., Ovary, Follicle - Cyst). If the cysts are thought to be treatment related, they may be graded to fully characterize the treatment effect. If applicable, the terms “bilateral” and “multiple” may be included in the diagnosis.



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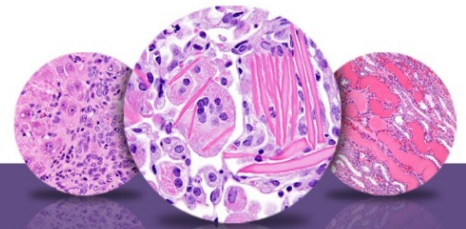
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