

NTP Nonneoplastic Lesion Atlas

Ovary – Hyperplasia, Sertoliform

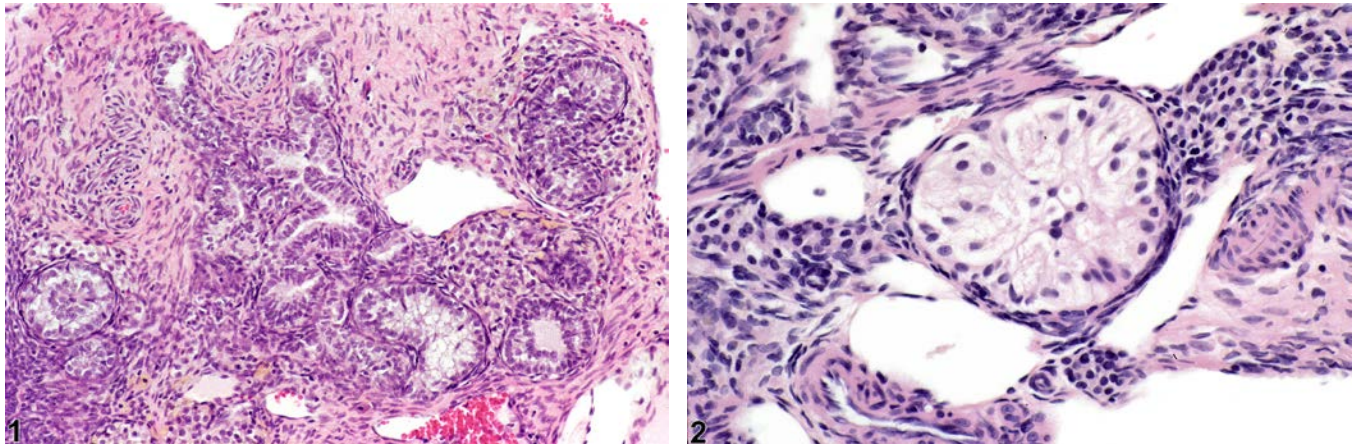
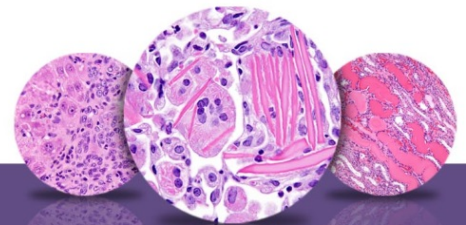


Figure Legend: **Figure 1** Ovary - Hyperplasia, Sertoliform in a female F344/N rat from a chronic study. The hyperplastic tubules are adjacent to the hilus of the ovary. **Figure 2** Ovary - Hyperplasia, Sertoliform in a female F344/N rat from a chronic study (higher magnification of Figure 1). The tubules are lined by columnar cells with indistinct cytoplasmic borders and basal nuclei.

Comment: The key features of Sertoli cell hyperplasia in the ovary are that the cells resemble their testicular counterpart histologically and that these proliferative lesions often arise in the region of the hilus (Figure 1). They are characterized by seminiferous-like tubules lined by cells with basally located nuclei and abundant, faintly eosinophilic, vacuolated cytoplasm extending into the lumen (Figure 2). Sometimes there may be areas with focal nests of Sertoli cells without obvious tubular structures. Sertoli cell hyperplasia is typically a focal lesion smaller than or equal to the size of a corpus luteum; there is no cellular atypia, and neither compression nor capsules are present.

Sertoli cell hyperplasia is thought to be derived from stromal cells in atrophic ovaries. This finding is associated with aging but may also be induced by chemicals. Sertoli cell hyperplasia must be differentiated from dysgerminoma and Sertoli cell tumor. Sertoli cell tumors are larger than the size of a corpus luteum; there is compression of adjacent tissue, and some cellular atypia may be present. Dysgerminomas are not reported in the rat and are a rare tumor in mice; the histologic appearance is of sheets of large, round, undifferentiated cells.



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Recommendation: Ovary - Hyperplasia, Sertoliform should be diagnosed and assigned a severity grade whenever present.

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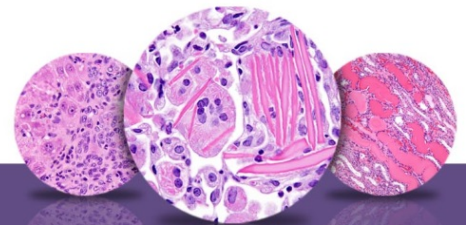
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Authors:

Gabrielle Willson, BVMS, DipRCPath, FRCPath, MRCVS
Senior Pathologist
Experimental Pathology Laboratories, Inc.
Research Triangle Park, NC

Karen Y. Cimon, DVM, MS
Senior Pathologist
Experimental Pathology Laboratories, Inc.
Research Triangle Park, NC