Ovary, Interstitial Cell – Hyperplasia

Figure Legend: Figure 1 Ovary, Interstitial cell - Hyperplasia in a female F344/N rat from a subchronic study. Clusters of pale interstitial cells are interspersed among follicles. Figure 2 Ovary, Interstitial cell - Hyperplasia in a female F344/N rat from a subchronic study (higher magnification of Figure 1). There are cords and nests of hyperplastic interstitial cells, which are composed of large polyhedral cells with pale eosinophilic granular cytoplasm and a central nucleus.

Comment: Typically in interstitial cell hyperplasia many variably sized clusters of pale-staining cells are interspersed among several follicles in various stages of development, including large atretic follicles, mature corpora lutea, areas of pigment deposition, and congested blood vessels (Figure 1). Cords and nests of hyperplastic interstitial cells are composed of large polyhedral cells with pale eosinophilic granular cytoplasm and central nuclei (Figure 2). Ovarian interstitial cell hyperplasia is a nonneoplastic proliferation of cellular components of the interstitial gland, derived from atretic follicles, corpora lutea, or ovarian stromal cells. This is a common aging change in rats and mice. It may also be induced by treatment with certain chemicals, such as gonadotropins and some organophosphate compounds.

Recommendation: Ovarian, Interstitial cell - Hyperplasia should be diagnosed and graded whenever present.
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References:


Full Text: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4253081/


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Abstract: http://ntp.niehs.nih.gov/go/6010


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