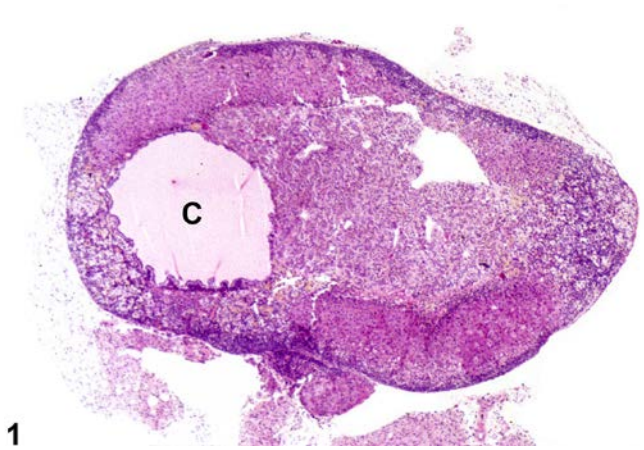
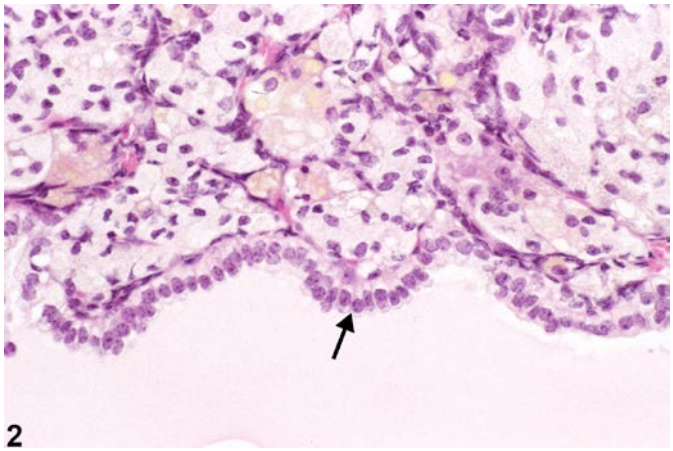
Adrenal Gland – Cyst





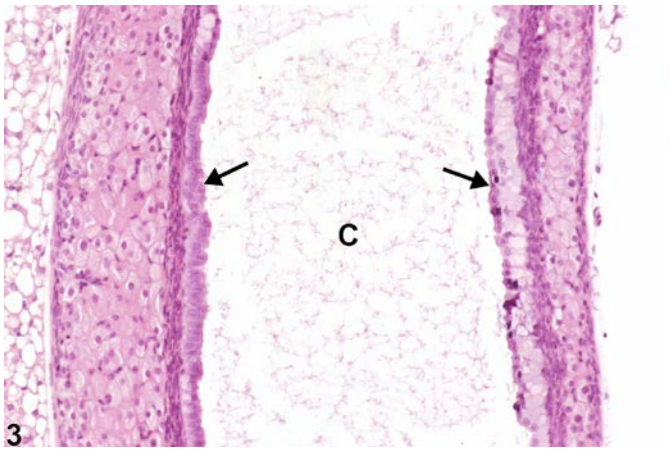
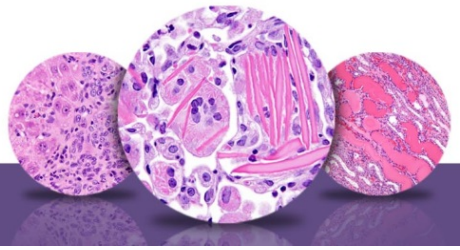


Figure Legend: **Figure 1** Adrenal gland, Cortex - Cyst in a female B6C3F1/N mouse from a chronic study. An adrenal cortical cyst (C), filled with amorphous pale eosinophilic material, compresses adjacent cortex and medulla. **Figure 2** Adrenal gland, Cortex - Cyst in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). A single layer of well-differentiated, low columnar epithelial cells (arrow) lines an adrenocortical cyst. **Figure 3** Adrenal gland, Cortex - Cyst in a female B6C3F1/N mouse from a chronic study. Cortical cyst (C) lined by cuboidal to columnar epithelial cells (arrows) contains flocculent, pale eosinophilic material.

Comment: Adrenal cysts (Figure 1, Figure 2, and Figure 3) are lined by cuboidal to ciliated columnar epithelium and may contain amorphous to flocculent, eosinophilic material. They may be located in the cortex or medulla and may cause variable distortion or compression of the adjacent tissue. These minor findings are more common in mice than in rats and are usually incidental, spontaneous changes of no



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clinical or toxicologic relevance. Cortical cysts must be distinguished from angiectasis (dilated vascular channels containing blood and lined by flat endothelial cells). Cortical cysts in rats must also be distinguished from cystic degeneration, a common lesion in certain rat strains, which features irregular, often large cavitated spaces filled with proteinaceous fluid but lack the epithelial lining of true cysts (Figure 2 and Figure 3).

Recommendation: Adrenal gland cysts should be diagnosed only if they occur with treatment-related increased incidences. In these cases, they should be diagnosed but not assigned of a severity grade. When diagnosed, an appropriate site modifier (i.e., cortex or medulla) should be included in the diagnosis to indicate the location of the cyst.

References:

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