Figure Legend: Figure 1 Harderian gland - Dilatation in a male B6C3F1 mouse from a chronic study. There are focal clusters of alveoli with dilated lumens lined by slightly flattened epithelial cells (arrow) some of which contain intraluminal porphyrin-pigment (arrowhead). Figure 2 Harderian gland - Dilation in a female B6C3F1 mouse from a chronic study. There is little interstitial fibrosis separating the dilated acini.

Comment: Harderian gland dilation is characterized by focal clusters of Harderian gland alveoli with dilated lumens lined by slightly flattened epithelial cells (Figure 1 and Figure 2); there is little if any associated interstitial fibrosis. Some dilated gland alveoli also exhibit intraluminal porphyrin pigment aggregates. Such dilatation is a common spontaneous finding in the Harderian glands of rats and mice but can also be induced by administration of various chemical agents.

Recommendation: Harderian gland dilation should be diagnosed only if there are treatment-related differences in incidence and/or severity. When diagnosed, it should be assigned a severity grade. The associated porphyrin pigment should not be diagnosed separately (unless warranted by severity), but should be described in the pathology narrative.

References:
Abstract: http://www.cacheriverpress.com/books/pathmouse.htm
Harderian Gland – Dilation

References:
Abstract: http://europepmc.org/abstract/MED/10987121

National Toxicology Program. 1993. NTP TR-402. Toxicology and Carcinogenesis Studies of Furan (CAS No. 110-00-9) in F344 Rats and B6C3F1 Mice (Gavage Studies). NTP, Research Triangle Park, NC.
Abstract: http://ntp.niehs.nih.gov/go/12255

National Toxicology Program. 1999. NTP TR-469. Toxicology and Carcinogenesis Studies of AZT (CAS No. 30516-87-1) and AZT/α-Interferon A/D in B6C3F1 Mice (Gavage Studies). NTP, Research Triangle Park, NC.
Abstract: http://ntp.niehs.nih.gov/go/6082


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