



NTP Nonneoplastic Lesion Atlas

Harderian Gland – Hyperplasia

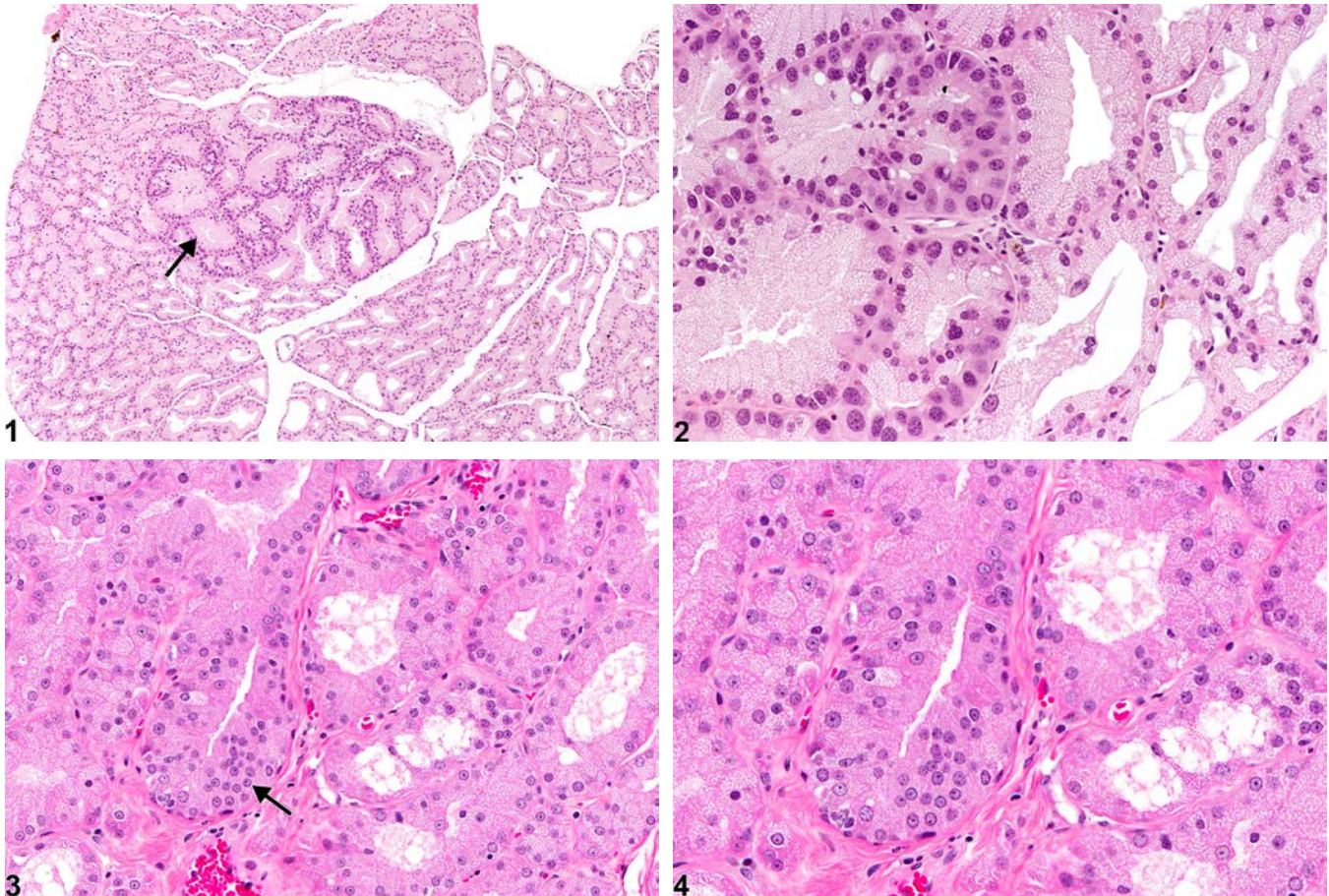
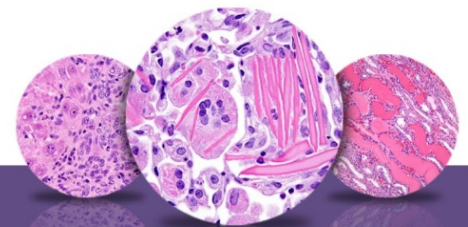


Figure Legend: **Figure 1** Harderian gland - Hyperplasia in a male B6C3F1 mouse from a chronic study. There is a well-demarcated focus of alveoli that doesn't compress the adjacent tissue. **Figure 2** Harderian gland - Hyperplasia in a male B6C3F1 mouse from a chronic study (higher magnification of Figure 1) The alveoli in the hyperplastic focus are lined by increased numbers of large cells with enlarged nuclei and a slightly different tinctorial quality than surrounding normal cells. **Figure 3** Harderian gland - Hyperplasia in a male F344\N rat from a chronic study. This hyperplastic focus (arrow) consists of a small cluster of alveoli lined by increased numbers of well-differentiated cells crowded into multiple layers. **Figure 4** Harderian gland - Hyperplasia in a male F344\N rat from a chronic study (higher magnification of Figure 3). The cells in this hyperplastic focus have a slightly different tinctorial quality than surrounding normal cells.



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Comment: Harderian gland hyperplasia (Figure 1, Figure 2, Figure 3, and Figure 4) is characterized as a well-demarcated but noncompressive focal area in which alveoli are lined by increased numbers of large cells with slightly different tinctorial quality than surrounding normal cells. Nuclei are often similar to those of normal cells, but in some cases, the nuclei may be enlarged (Figure 1 and Figure 2). The increased cell numbers can result in crowding and multiple cell layers (Figure 3 and Figure 4), and even formation of small papillary projections. The absence of compression or marked nuclear pleomorphism can help distinguish Harderian gland hyperplasia from adenoma. Harderian gland hyperplasia may occur as a reactive sequela to degeneration and inflammation but can also be a primary toxic effect and precursor to Harderian gland neoplasia.

Recommendation: Harderian gland hyperplasia should be diagnosed and assigned a severity grade. Whether the hyperplasia is considered a primary effect or a secondary reactive change should be noted in the narrative, especially if there are treatment-related differences in incidence and/or severity.

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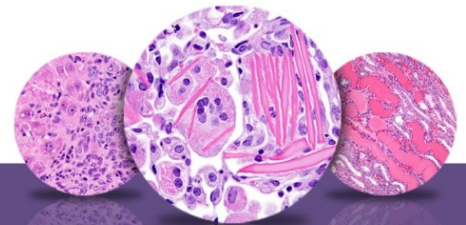
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