



NTP Nonneoplastic Lesion Atlas

Harderian Gland – Necrosis

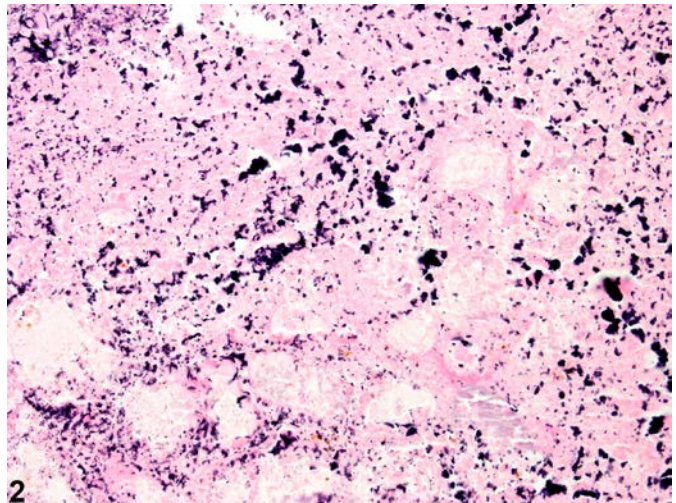
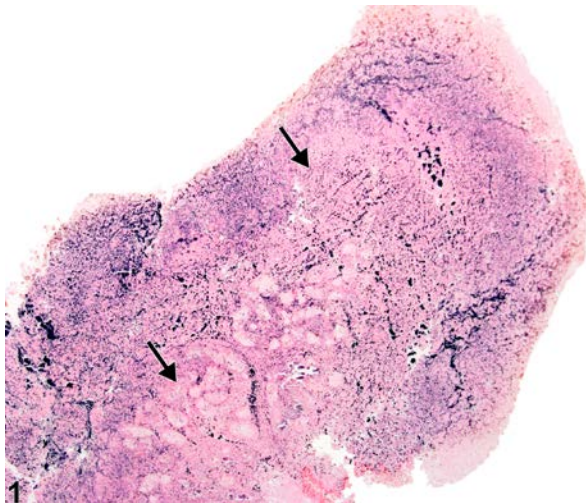


Figure Legend: **Figure 1** Harderian gland - Necrosis in a male B6C3F1 mouse from a chronic study. Large areas are effaced and replaced by necrotic cell debris (arrows). **Figure 2** Harderian gland - Necrosis in a male B6C3F1 mouse from a chronic study (higher magnification of Figure 1). There is abundant cellular debris and loss of cellular and architectural detail.

Comment: Necrosis is characterized by cell swelling, nuclear pyknosis and/or karyorrhexis, and loss of cellular and architectural detail. Extensive tissue necrosis is characterized by effacement of the normal architecture and replacement by necrotic cell debris (Figure 1 and Figure 2). Necrosis is typically accompanied by inflammation. Hemorrhage or other tissue changes, such as mineralization, may also be present. Trauma associated with retro-bulbar bleeding procedures is a common cause of Harderian gland necrosis. Necrosis and degeneration of the Harderian gland can also result from excessive exposure to light; as an early change in sialodacyroadentis virus infection in rats; or from injection of irritants in the retrobulbar space.

Recommendation: If Harderian gland necrosis is a primary change (especially if related to treatment), it should be diagnosed and assigned a severity grade. If necrosis is a feature of other lesions (e.g., extensive inflammation), it should not be diagnosed separately (unless warranted by severity), though it should be described in the pathology narrative. Associated lesions, such as inflammation, hemorrhage, or mineralization, should not be diagnosed separately, unless warranted by severity.



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