**Lacral Gland – Infiltration Cellular, Mononuclear Cell**

**Figure Legend:** Figure 1 Lacrimal gland - Infiltration cellular, Mononuclear cell in a male B6C3F1 mouse from a chronic study. Variably sized interstitial foci of mononuclear cells (mainly lymphocytes) (arrow) are present in the lacrimal gland. Figure 2 Lacrimal gland - Infiltration cellular, Mononuclear cell in a male B6C3F1 mouse from a chronic study (higher magnification of Figure 1). The mononuclear cells (mainly lymphocytes) are present without evidence of tissue damage.

**Comment:** Scattered, variably sized interstitial foci of mononuclear cells (usually lymphocytes) are common in the lacrimal glands of rats and mice (Figure 1 and Figure 2), often increasing in incidence and severity in older animals. Increased incidences and severity of such infiltrates can also occur as treatment-related toxic effects or in other pathologic conditions.

**Recommendation:** Lacrimal gland mononuclear cell infiltrates should be diagnosed and assigned a severity grade only if there are treatment-related differences in the incidence and/or severity. Mononuclear cell infiltrates can be distinguished from inflammation by features of inflammation such as tissue destruction, hemorrhage, fibrosis, edema, and the presence of other leukocyte types.

**References:**
Abstract: [http://www.cacheriverpress.com/books/pathmouse.htm](http://www.cacheriverpress.com/books/pathmouse.htm)
References:


Full-text: [http://www.iovs.org/content/50/5/2245.full](http://www.iovs.org/content/50/5/2245.full)


Full-text: [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1850552/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1850552/)

National Toxicology Program. 1990. NTP TR-386. Toxicology and Carcinogenesis Studies of Tetranitromethane (CAS No. 509-14-8) in F344/N Rats and B6C3F₁ Mice (Inhalation Studies). NTP, Research Triangle Park, NC.

Full-text: [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2913359/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2913359/)

References:


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