

NTP Nonneoplastic Lesion Atlas



Lymph Node – Hyperplasia, Mast Cell



Figure Legend: Figure 1 Lymph node - Hyperplasia, Mast cell in a female B6C3F1/N mouse from a chronic study. Mast cells are increased within the lymph node parenchyma (arrow). Figure 2 Lymph node - Hyperplasia, Mast cell in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). Normal mast cells aggregate around lymph node blood vessels (arrow).

Comment: Mast cell hyperplasia is an increase in the number of mast cells above that normally found in lymph nodes (i.e., concurrent controls). Mast cells may accumulate in lymph nodes as individual and/or clusters of cells within the nodal sinuses and parenchyma (Figure 1 and Figure 2, arrows). Mast cells contribute to the induction of the primary immune response by activation and migration from the site of antigen encounter to draining lymph nodes, where they express chemokines that regulate T-cell recruitment. Giemsa or toluidine blue can specifically identify the metachromic mast cell granules.

Recommendation: Mast cell hyperplasia should be diagnosed and graded whenever present.

References:

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Abstract: http://ntp.niehs.nih.gov/go/10166



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References:

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