

NTP Nonneoplastic Lesion Atlas

Lymph Node – Angiectasis

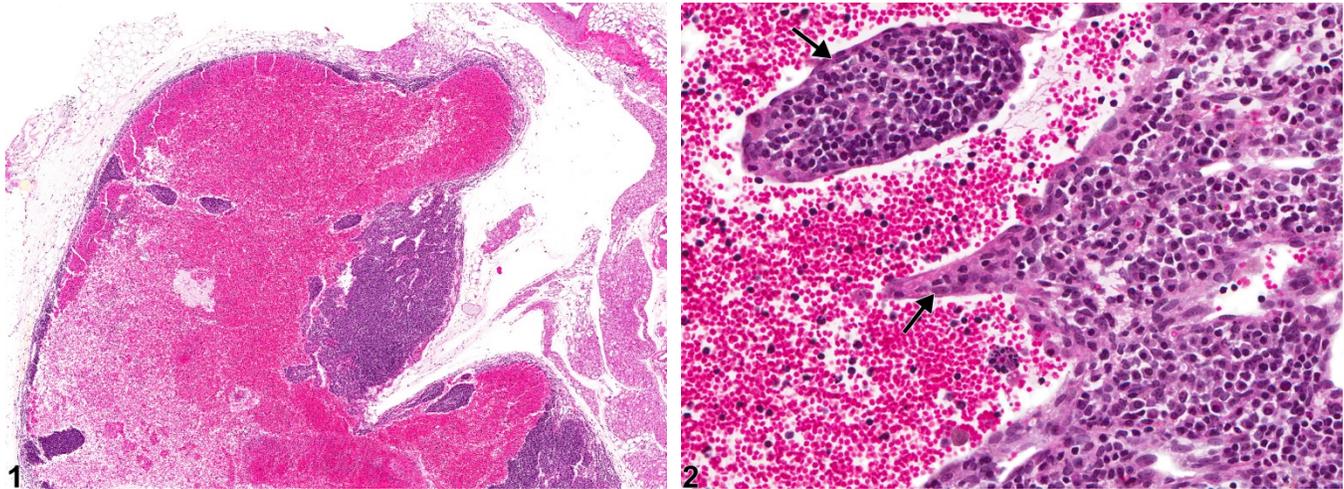
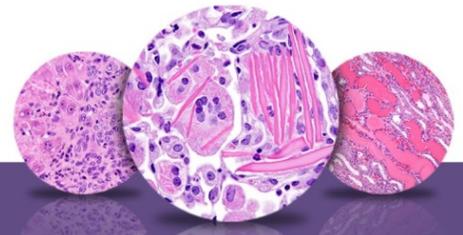


Figure Legend: **Figure 1** Lymph node - Angiectasis in a female B6C3F1/N mouse from a chronic study. The lymph node architecture is distorted by a markedly distended vessel. **Figure 2** Lymph node - Angiectasis in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). The dilated blood-filled cavity is lined by endothelium (arrows).

Comment: Angiectasis of the lymph node is characterized by the dilatation of thin veins within the cortex, medulla, capsule, hilus, or surrounding connective tissue (Figure 1). The vascular spaces are lined by unremarkable endothelial cells and are typically filled with blood. There is no apparent increase in the number of vessels. It is seen most often in the mesenteric lymph nodes of some mouse and rat strains and may not be associated with hemorrhage. Angiectasis should be distinguished from congestion, sinus erythrocytosis, hemorrhage, hemangioma, and hemangiosarcoma. The distinction between angiectasis and congestion is sometimes difficult, but with congestion, the degree of vascular dilation is considered physiologically normal. Angiectasis differs from hemorrhage; with angiectasis, the blood is contained within endothelium-lined vascular spaces (Figure 2, arrows), whereas with hemorrhage, the blood is outside the vascular spaces. Angiectasis may be difficult to differentiate from sinus erythrocytosis because dilated blood vessels can resemble dilated and blood-filled lymphatic vessels. The distinction between angiectasis and hemangioma should be attempted, although the difference is not always obvious. Hemangiomas tend to be well-circumscribed, unencapsulated masses composed of tightly packed, dilated vascular spaces. Each vascular space is enclosed and lined by a single layer of normal-appearing endothelial cells aligned on collagenous septa, which are usually thin,



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although some have broad collagenous stroma. Angiectasis does not usually present as a well-circumscribed mass; the dilated vascular channels often course irregularly through the hematopoietic tissue. Furthermore, the dilated vascular channels of angiectasis are not invasive and do not demonstrate endothelial cell atypia, which differentiates this lesion from hemangiosarcoma. Previous terms for angiectasis include “hemangiectasis,” “hemangiectasia,” “vasodilation,” and “vasodilatation.”

Recommendation: Whenever angiectasis is present in lymph nodes, it should be diagnosed and assigned a severity grade.

References:

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