



NTP Nonneoplastic Lesion Atlas

Nose – Eosinophilic Material

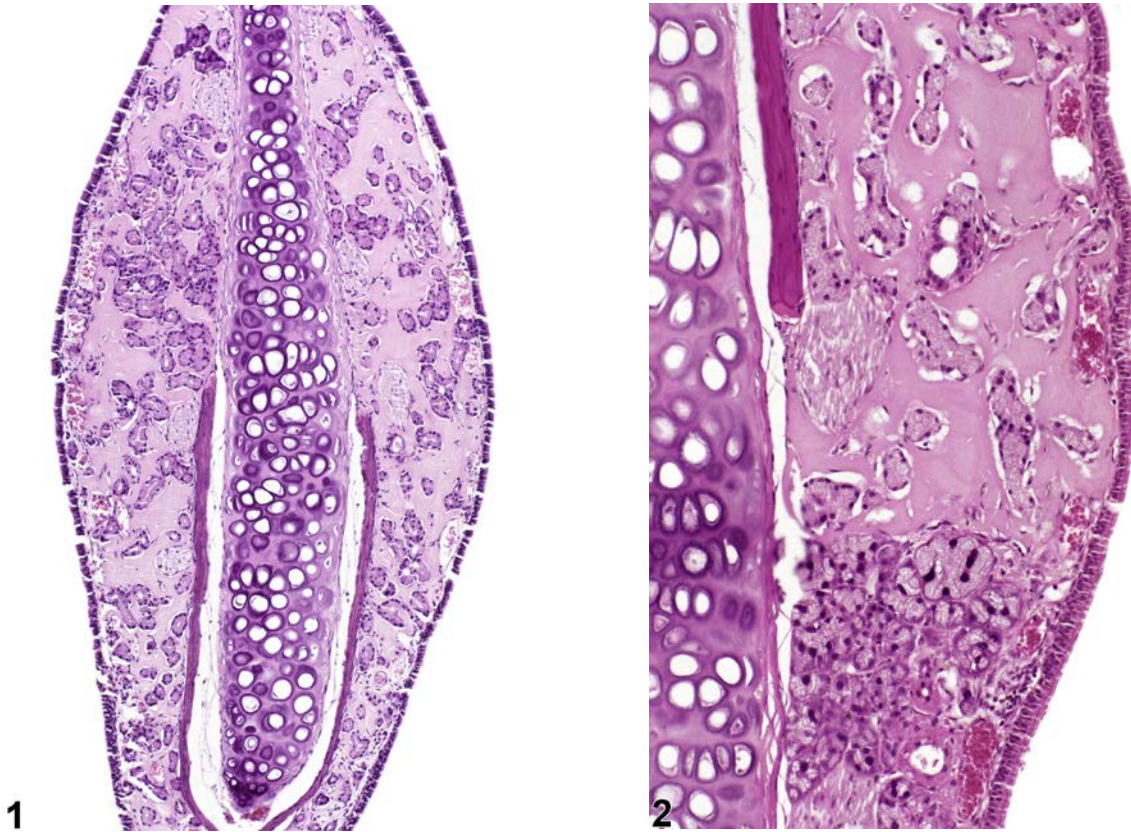


Figure Legend: **Figure 1** Nose - Eosinophilic material in a male B6C3F1/N mouse from a chronic study. There is bilateral accumulation of an eosinophilic material in the lamina propria of the ventral nasal septum. **Figure 2** Nose - Eosinophilic material in a male B6C3F1/N mouse from a chronic study. The eosinophilic material in the lamina propria separates the glands of the nasal septum.

Comment: Nose - Eosinophilic material is a general term for any amorphous, eosinophilic material that may accumulate in the submucosa in the nasal cavity, including amyloid. A common site for accumulation of eosinophilic material is the ventral nasal septum just dorsal to the vomeronasal organ (Figure 1). This material was previously thought to be amyloid due to its morphologic appearance, but several recent publications by Doi et al. (2007, 2009, 2010) have shown that this material is not, in many cases, amyloid but consists of collagen and complex carbohydrates that may be produced by nasal gland epithelial cells that is Congo red negative. In some cases, however, amyloid deposition is relatively common and can be found in the nasal cavity.



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Recommendation: In the absence of special or immunohistochemical stains showing that the material is amyloid, this change should be diagnosed as “Nose - Eosinophilic material.” Since this is a spontaneous change that increases with age and, to date, is not known to be increased with treatment, this lesion should not be diagnosed unless there is clear evidence of a treatment-related effect. This change need not be graded unless grading would clarify a treatment effect.

References:

Doi T, Kokoshima H, Kanno T, Sato J, Wako Y, Tsuchitani M, Matsui T. 2010. New findings concerning eosinophilic substance deposition in mouse nasal septum: Sex difference and no increase in seniles. *Toxicol Pathol* 38:631-636.

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Doi T, Kotani Y, Kokoshima H, Kanno T, Wako Y, Tsuchitani M. 2007. Eosinophilic substance is “not amyloid” in the mouse nasal septum. *Vet Pathol* 44:796-802.

Abstract: <http://www.ncbi.nlm.nih.gov/pubmed/18039892>

Doi T, Kotani Y, Kokoshima H, Kanno T, Wako Y, Tsuchitani M, Matsui T. 2009. Deposition process of eosinophilic substance in mouse nasal septum. *J Vet Med Sci* 71:931-935.

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