



NTP Nonneoplastic Lesion Atlas

Eye, Vitreous – Proteinaceous Fluid

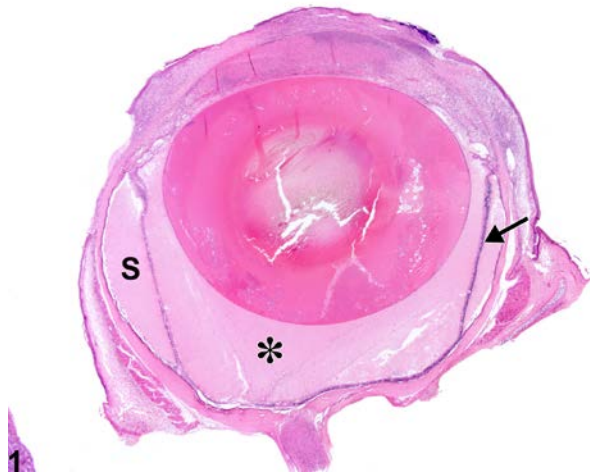


Figure Legend: **Figure 1** Eye, Vitreous - Proteinaceous fluid in a male F344/N rat from a subchronic study. There is homogeneous pale eosinophilic material (asterisk) with few inflammatory cells posterior to the lens; there is also retinal detachment and degeneration (arrow) and proteinaceous fluid in the subretinal space (S).

Comment: Proteinaceous fluid in the vitreous (Figure 1) is characterized by accumulations of homogeneous, pale, eosinophilic material (consistent with proteinaceous or fibrinous fluid) with no or very few inflammatory cells in the vitreous. Causes include (but are not limited to) lens cataract and retinal detachment and degeneration. When there is retinal detachment, there may be similar fluid in the subretinal space (Figure 1).

Recommendation: Intravitreal accumulations of proteinaceous fluid should be diagnosed whenever present and assigned a severity grade. Associated lesions (e.g., lens cataract or retinal detachment) should be diagnosed separately. If there are a significant number of inflammatory cells within the fluid, inflammation may be a more appropriate diagnosis.

References:

National Toxicology Program. 2012. NTP TR-579. Toxicology and Carcinogenesis Studies of *N,N*-Dimethyl-*p*-Toluidine (CAS No. 99-97-8) in F344/N Rats and B6C3F1/N Mice (Gavage Studies). NTP, Research Triangle Park, NC.

Abstract: <http://ntp.niehs.nih.gov/go/37612>



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References:

Smith RS. 2002. Choroid, lens, and vitreous. In: Systematic Evaluation of the Mouse Eye: Anatomy, Pathology, and Biomethods (Smith RS, John SWM, Nishina PM, Sundberg JP, eds). CRC Press, Boca Raton, FL, 2002, 161-193.

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