**Figure Legend:** Figure 1 Eye, Anterior chamber - Proteinaceous fluid in a female F344/N rat from a chronic study. Anterior chamber proteinaceous fluid (arrow) is characterized by accumulations of homogeneous pale eosinophilic material that contains few if any inflammatory cells. Figure 2 Eye, Anterior chamber - Proteinaceous fluid in a female F344/N rat from a chronic study. There are accumulations of homogeneous pale eosinophilic material in the anterior chamber (arrow) that contains few if any inflammatory cells.

**Comment:** Anterior chamber proteinaceous fluid is characterized by intracameral accumulations of homogeneous pale eosinophilic material (often including fibrin) that contains few if any inflammatory cells (Figure 1 and Figure 2). Anterior chamber proteinaceous fluid can compress the iridocorneal filtration angle channels and/or the adjacent trabecular meshwork, impeding normal drainage of aqueous humor with resultant elevations in intraocular pressure. (Other ocular lesions in Figure 1 and/or Figure 2 include posterior synechiae, lens cataract with mineralization, and/or iridial inflammation.)

**Recommendation:** Proteinaceous fluid in the anterior chamber should be diagnosed as “Eye, Anterior chamber - Proteinaceous fluid” and assigned a severity grade. If anterior chamber proteinaceous fluid is part of a more dispersed inflammatory process in the eye, it need not be diagnosed separately but should be described in the pathology narrative.
References:

National Toxicology Program. 1997. NTP TR-450. Toxicology and Carcinogenesis Studies of Tetrafluoroethylene (CAS No. 116-14-3) in F344 Rats and B6C3F1 Mice (Inhalation Studies). NTP, Research Triangle Park, NC.


Author:

Margarita M. Gruebbel, DVM, PhD, DACVP
Senior Pathologist
Experimental Pathology Laboratories, Inc.
Research Triangle Park, NC