Figure Legend: Figure 1 Ear, Middle ear - Proteinaceous fluid in a male Fischer 344/N rat from a chronic study. There is acellular, eosinophilic, proteinaceous fluid in the tympanic cavity of the middle ear.

Comment: Proteinaceous fluid may accumulate in the inner, middle, or external ear canals as the result of mild to moderate vascular damage. Proteinaceous fluid in the ear canals is characterized by eosinophilic, homogeneous material with few to no inflammatory cells (Figure 1).

Recommendation: Proteinaceous fluid should be diagnosed and assigned a severity grade. An appropriate site modifier (e.g., middle ear or external ear) should be used in the diagnosis to indicate the location of the fluid. If the fluid is the result of an inflammatory process (i.e., there is other evidence of inflammation in the surrounding tissues), inflammation should be diagnosed and the proteinaceous fluid described in the pathology narrative.

References:

National Toxicology Program. 1997. NTP TR-459. Toxicology and Carcinogenesis Studies of t-Butylhydroquinone (CAS No. 1948-33-0) in F344/N Rats and B6C3F1 Mice (Feed Studies). NTP, Research Triangle Park, NC.
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Author:

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