



NTP Nonneoplastic Lesion Atlas

Gallbladder – Hyaline droplet accumulation

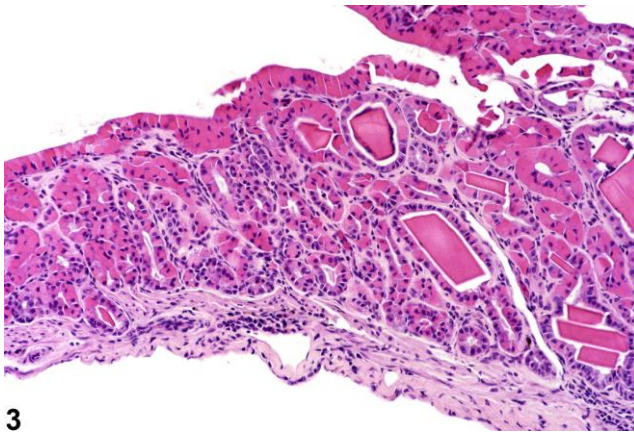
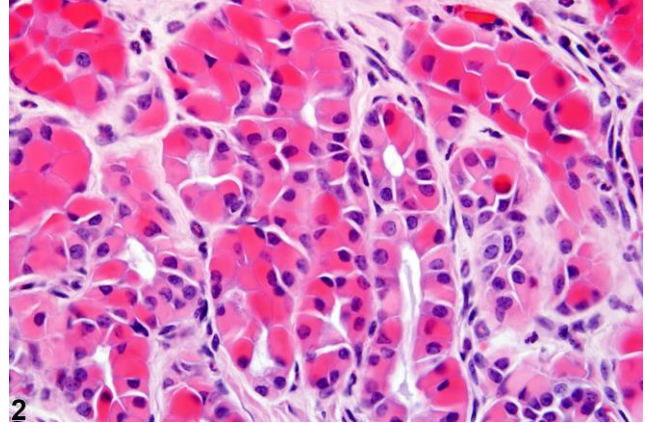
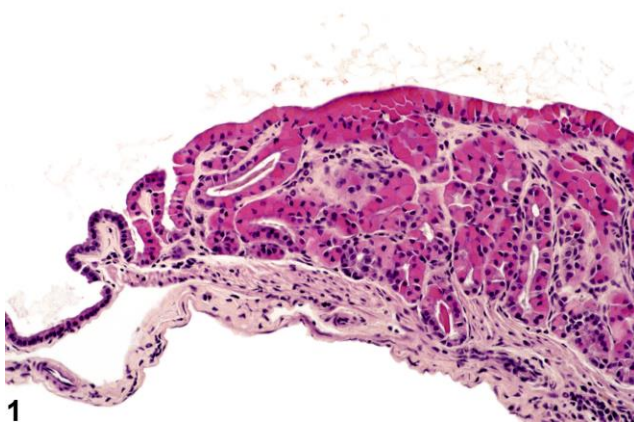


Figure Legend: **Figure 1** Hyaline droplet accumulation in the gallbladder in a male B6C3F1 mouse from a chronic study. **Figure 2** Hyaline droplet accumulation in the gallbladder in a male B6C3F1 mouse from a chronic study (higher magnification of Figure 1). **Figure 3** Hyaline droplet accumulation with extracellular crystalline material in the gallbladder in a male B6C3F1 mouse from a chronic study.

Comment: Cytoplasmic inclusions of homogeneous eosinophilic hyaline-like material may be seen in older mice in intrahepatic biliary epithelial cells, as well as epithelial cells in the gallbladder (Figure 1, Figure 2, and Figure 3). In marked cases, there is hyperplasia of the glandular epithelium, and crystalline forms of the eosinophilic inclusion material may be present both intracellularly and extracellularly. The hyaline material has been identified as a chitinase-like protein of unknown function.



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Recommendation: Hyaline droplet accumulation should be diagnosed and given a severity grade, and salient features should be described in the pathology narrative. Associated lesions, such as inflammation or epithelial cell degeneration, necrosis, or hyperplasia, should be diagnosed separately if sufficiently prominent.

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Author:

Robert R. Maronpot, DVM, MS, MPH, DACVP, DABT, FIATP
Senior Pathologist
Experimental Pathology Laboratories, Inc.
Research Triangle Park, NC