

NTP Nonneoplastic Lesion Atlas

Gallbladder, Epithelium – Hyperplasia

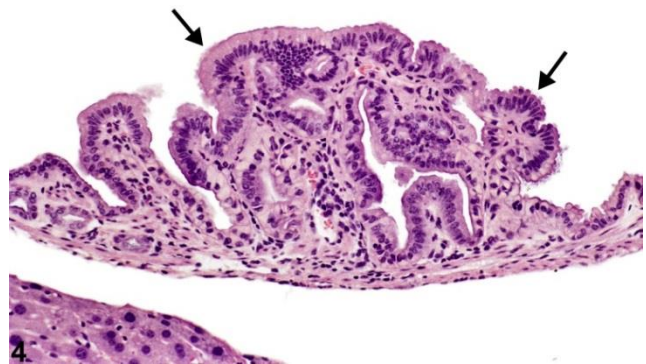
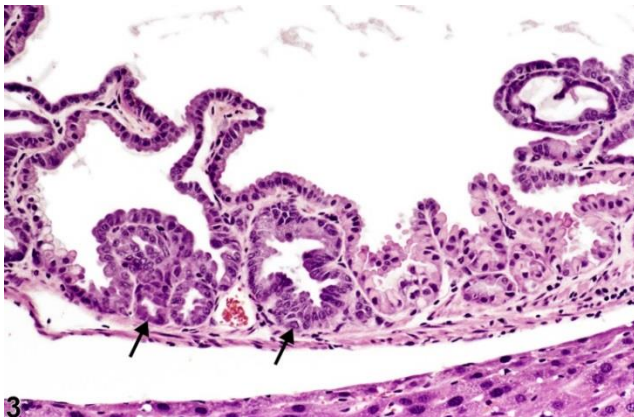
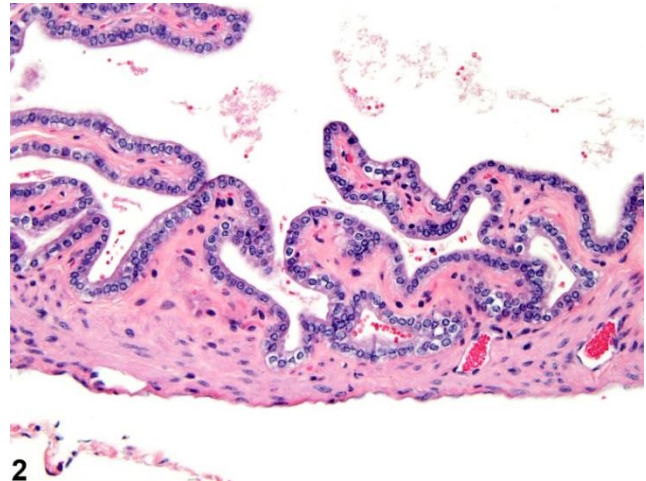
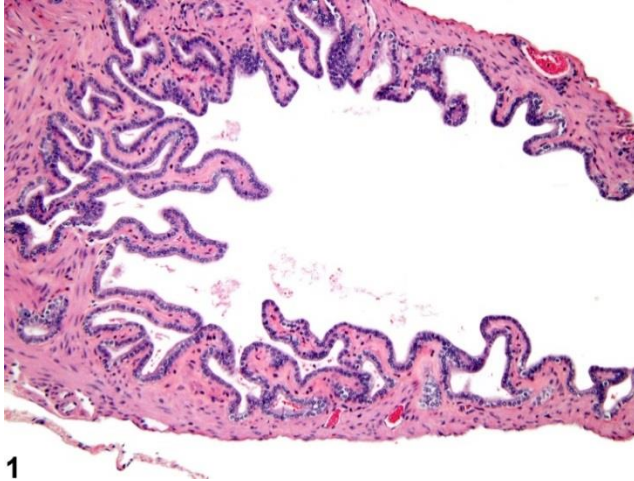
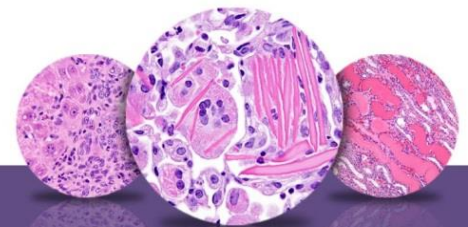


Figure Legend: **Figure 1** Epithelial hyperplasia in a male B6C3F1 mouse from a chronic study. **Figure 2** Epithelial hyperplasia in a male B6C3F1 mouse from a chronic study (higher magnification of Figure 1). **Figure 3** Epithelial hyperplasia—arrows indicate papillary hyperplasia in a male B6C3F1 mouse from a chronic study. **Figure 4** Epithelial hyperplasia—arrows indicate papillary hyperplasia in a male B6C3F1 mouse from a chronic study.

Comment: Figure 1 and Figure 2 are from a partially collapsed normal gallbladder. Note the thickness of the muscular wall. Gallbladder hyperplasia varies from a few cells on papillary folds to generalized papillary projections involving most of the mucosa (Figures 3 and 4, arrows). Hyaline droplets may be present in the lining epithelium.



NTP Nonneoplastic Lesion Atlas

Gallbladder, Epithelium – Hyperplasia

Recommendation: Mucosal or epithelial hyperplasia of the gallbladder is uncommon in NTP studies and should be recorded whenever present and given a severity grade. Severe associated lesions such as inflammation or hyaline droplet accumulation should be diagnosed separately. The pathology narrative should define any unusual features of the case(s) being diagnosed.

References:

Greaves P. 2007. Histopathology of Preclinical Toxicity Studies: Interpretation and Relevance in Drug Safety Evaluation, 3rd ed. Elsevier, Amsterdam.

Abstract: <http://www.sciencedirect.com/science/book/9780444527714>

Harada T, Enomoto A, Boorman GA, Maronpot RR. 1999. Liver and gallbladder. In: Pathology of the Mouse: Reference and Atlas (Maronpot RR, Boorman GA, Gaul BW, eds). Cache River Press, Vienna, IL, 119–183.

Abstract: <http://www.cacheriverpress.com/books/pathmouse.htm>

Thoolen B, Maronpot RR, Harada T, Nyska A, Rousseaux C, Nolte T, Malarkey D, Kaufmann W, Kutter K, Deschl U, Nakae D, Gregson R, Winlove M, Brix A, Singl B, Belpoggi F, Ward JM. 2010. Hepatobiliary lesion nomenclature and diagnostic criteria for lesions in rats and mice (INHAND). Toxicol Pathol 38:5S–81S.

Full-Text: http://tpx.sagepub.com/content/38/7_suppl/5S.full

Author:

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