



NTP Nonneoplastic Lesion Atlas

Thyroid Gland, Follicle – Degeneration

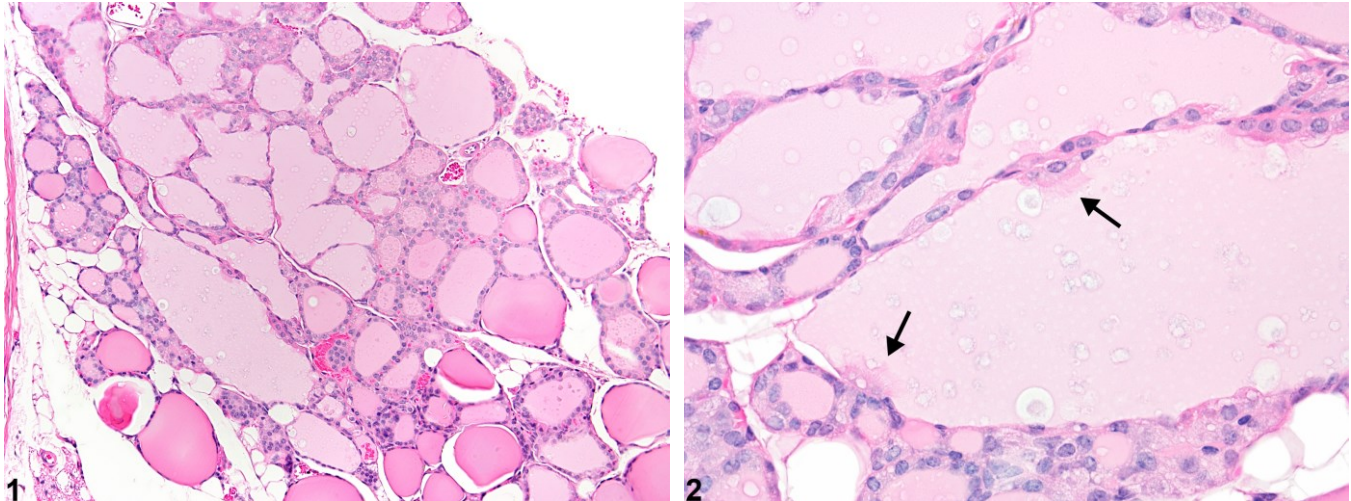


Figure Legend: **Figure 1** Thyroid Gland, Follicle - Degeneration in a female B6C3F1 mouse from a chronic study. Adjacent coalescing follicles are dilated and contain pale-staining colloid. **Figure 2** Thyroid Gland, Follicle - Degeneration in a female B6C3F1 mouse from a chronic study. Degenerating follicles are partially lined by ciliated cells (arrows).

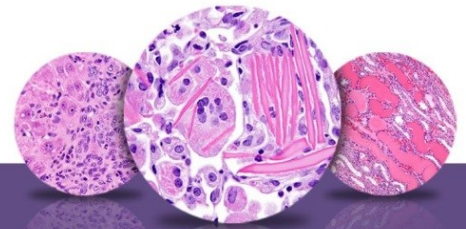
Comment: Follicular degeneration consists of dilatation and loss of normal follicular shape, coalescence of adjacent follicles, and decreased intensity of colloid staining (Figure 1 and Figure 2). It occurs commonly in mice but uncommonly in rats. Treatment-associated follicular degeneration has occurred in at least one NTP subchronic study in mice; in that study it was associated with thyroid pigmentation. A large number of cases have occurred in control and treated mice in chronic studies, and in some the epithelial cells lining the degenerating dilated follicles are ciliated (Figure 2, arrows).

Recommendation: Whenever present, this degenerative change should be documented and graded. If the degeneration is bilateral, it should be indicated in the diagnosis, and the severity grade should be based on the most severely affected gland.

References:

Hardisty JF, Boorman GA. 1999. Thyroid and parathyroid glands. In: Pathology of the Mouse: Reference and Atlas (Maronpot RR, Boorman GA, Gaul BW, eds). Cache River Press, Vienna, IL, 537–554.

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



NTP Nonneoplastic Lesion Atlas

Thyroid Gland, Follicle – Degeneration

Authors:

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

Amy Brix, DVM, PhD, DACVP
Senior Pathologist
Experimental Pathology Laboratories, Inc.
Research Triangle Park, NC