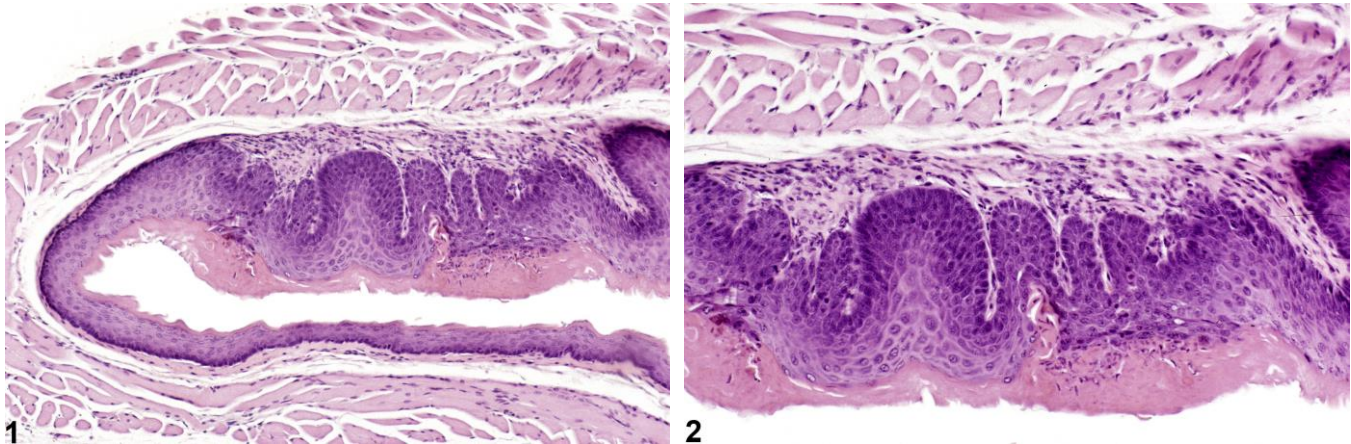


# NTP Nonneoplastic Lesion Atlas

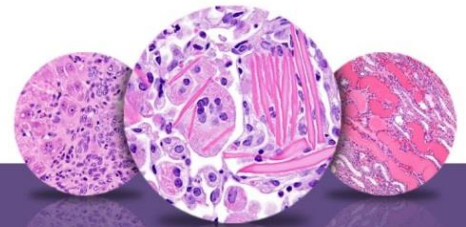
## *Esophagus – Hyperplasia*



**Figure Legend:** **Figure 1** Esophagus, Epithelium - Hyperplasia in a female B6C3F1 mouse from a chronic study. There are rete peg-like structures and accompanying hyperkeratosis. **Figure 2** Esophagus, Epithelium - Hyperplasia in a female B6C3F1 mouse from a chronic study (higher magnification of Figure 1). There are rete peg-like structures and accompanying hyperkeratosis.

**Comment:** Hyperplasia of the mucosal epithelium is characterized by an increased number of epithelial cells and the absence of atypia. The epithelial cells may be of one or more epithelial cell types (basal, spinous, or granulosum). In severe cases, rete peg-like structures may extend into the submucosa (Figure 1 and Figure 2). Hyperkeratosis (increased thickness of the stratum corneum) is often seen when hyperplasia of the mucosa is present. Hyperplasia of the squamous mucosa with hyperkeratosis has been reported in the esophagus of the rat following chronic high-dose administration of vehicles such as alcohol.

**Recommendation:** Epithelial hyperplasia should be diagnosed and graded based on the size of the area of esophagus affected and the thickness of the hyperplastic esophageal epithelium. Hyperkeratosis associated with hyperplasia is usually not diagnosed as a separate entity, although it may be mentioned in the narrative. When hyperkeratosis is present in the absence of hyperplasia or when the hyperkeratosis is extreme, it should be diagnosed and graded separately from the hyperplasia (see description of Esophagus - Hyperkeratosis).



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## *Esophagus – Hyperplasia*

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### Authors:

Linda H. Kooistra, DVM, PhD, DACVP  
Pathologist  
Charles River Laboratories, Inc.  
Research Triangle Park, NC

Abraham Nyska, DVM, Diplomate ECVP, Fellow IATP  
Expert in Toxicologic Pathology  
Visiting Full Professor of Pathology  
Sackler School of Medicine, Tel Aviv University  
Timrat Israel