

NTP Nonneoplastic Lesion Atlas

Salivary Gland, Parotid, Acinus – Hypertrophy

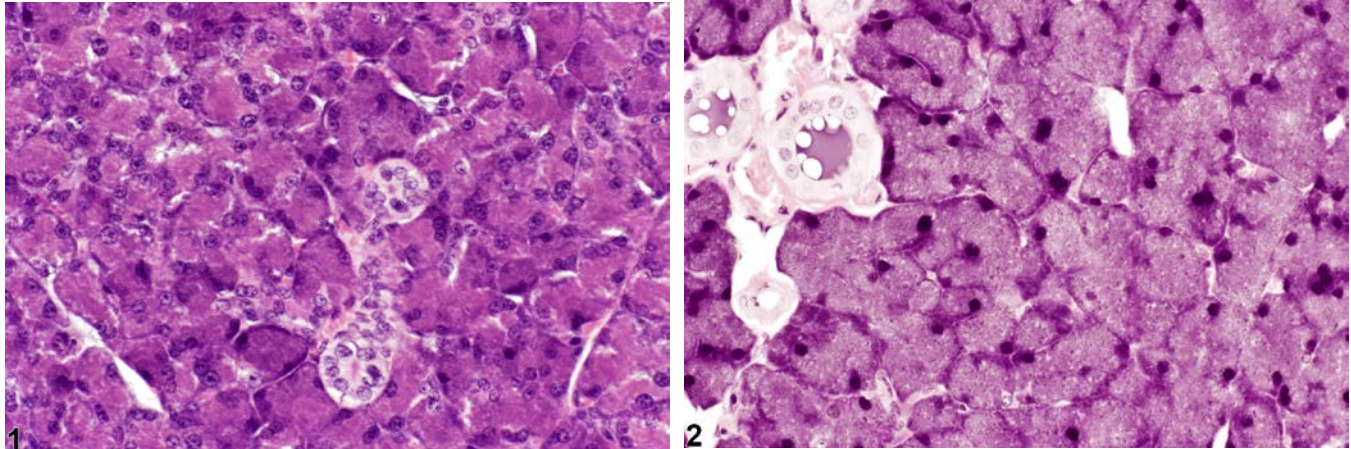


Figure Legend: **Figure 1** Normal parotid salivary gland from a male F344/N rat from a subchronic study. **Figure 2** Salivary gland, Parotid, Acinus - Hypertrophy in a male F344/N rat from a subchronic study. The acinar cells are diffusely enlarged.

Comment: Diffuse hypertrophy of parotid salivary gland acinar cells not associated with basophilic foci is rare in NTP studies. Likewise, diffuse acinar cell hypertrophy of the submandibular and sublingual salivary glands is rare in B6C3F1 mice and Fischer 344 rats. Acinar cell hypertrophy (Figure 2) is characterized by increased cell size primarily due to an increase in cytoplasm, although the nuclei are also usually larger in hypertrophied cells. The intense basophilia seen with hypertrophic basophilic foci is not present, and the cells are typically not as large. Diffuse hypertrophy of acinus cells often can be a subtle change requiring close comparison with control animals.

Recommendation: Salivary gland acinar hypertrophy should be diagnosed and graded based on the degree of increase in acinar cell size and number of cells affected. Multifocal hypertrophy would be assigned a higher severity grade than focal hypertrophy. If the hypertrophy is diffuse throughout the gland, then the modifier “diffuse” should be added to the diagnosis.

References:

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



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Abstract: <http://ntp.niehs.nih.gov/go/11968>

Neuenschwander SB, Elwell MR. 1990. Salivary glands. In: Pathology of the Fischer Rat (Boorman GA, Montgomery CA, MacKenzie WF, eds). Academic Press, San Diego, CA, 31-42.

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