

NTP Nonneoplastic Lesion Atlas

Oral Mucosa, Gingiva – Ectopic Tissue

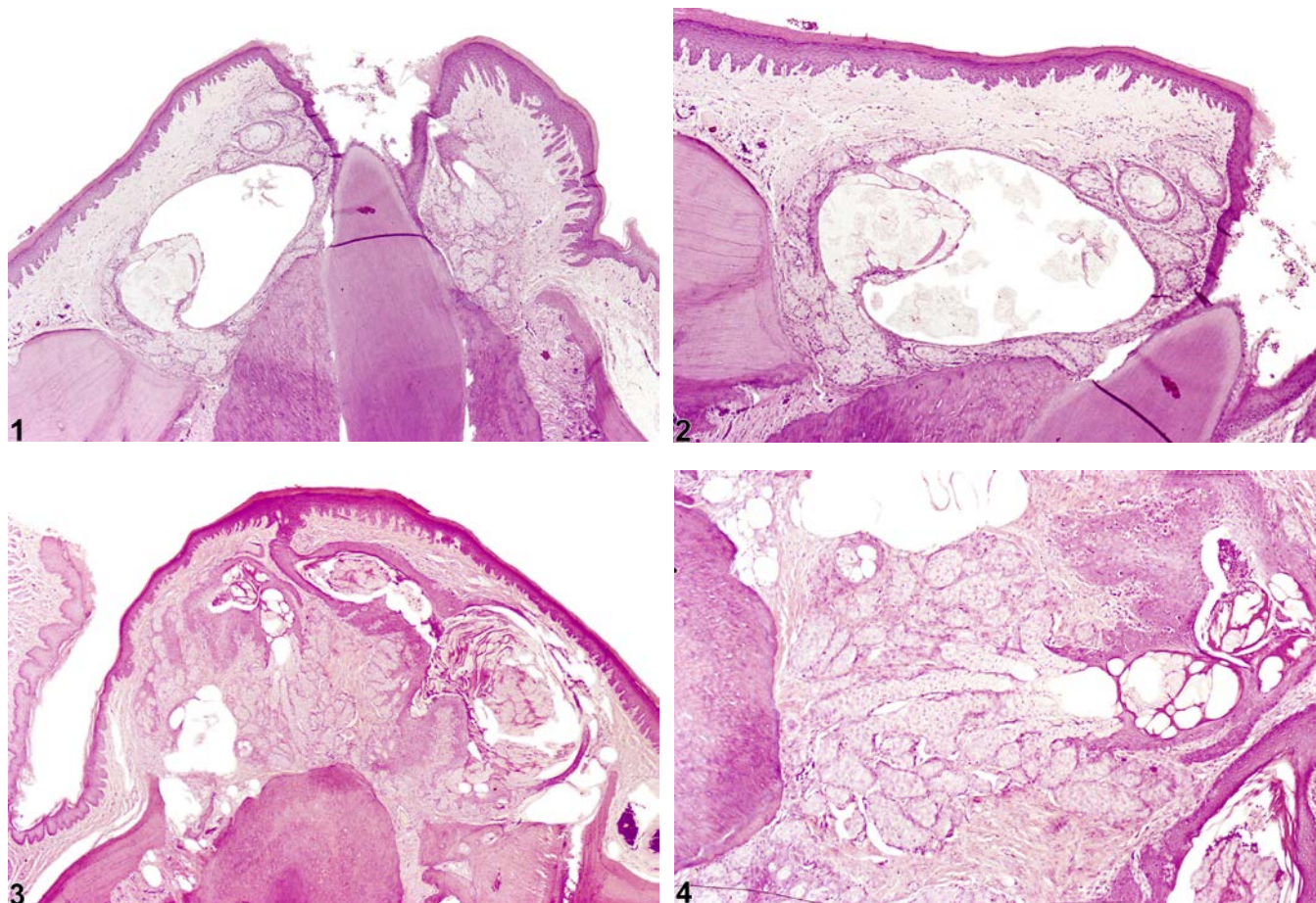


Figure Legend: **Figure 1** Oral mucosa, Gingiva - Ectopic tissue, Sebaceous gland in male F344/N rat from a chronic study. There are clusters of sebaceous glands in the gingiva. **Figure 2** Oral mucosa, Gingiva - Ectopic tissue, Sebaceous gland in male F344/N rat from a chronic study (higher magnification of Figure 1). The clusters of sebaceous glands in the gingiva are adjacent to a dilated duct. **Figure 3** Oral mucosa, Gingiva - Ectopic tissue, Sebaceous gland in male F344/N rat from a chronic study. There are clusters of sebaceous glands in the gingiva. **Figure 4** Oral mucosa, Gingiva - Ectopic tissue, Sebaceous gland in male F344/N rat from a chronic study (higher magnification of Figure 3). The clusters of sebaceous glands in the gingiva appear to feed into a dilated duct.

Comment: Ectopic sebaceous glands in the oral cavity are also known as Fordyce's granules. Histologically, these are a collection of sebaceous glands unassociated with hair follicles (Figure 1, Figure 2, Figure 3, and Figure 4). The glands in the molar gingiva are often associated with cystically



NTP Nonneoplastic Lesion Atlas

Oral Mucosa, Gingiva – Ectopic Tissue

dilated ducts filled with sebum. In one NTP study examining 734 male and 722 female F344 rats, Fordyce's granules were very common in the midsagittal gingiva of the upper incisor in males and increased in incidence with age (34.2%, 50%, and 56.3% in 26-week, 65-week, and 2-year studies, respectively). Ectopic sebaceous glands were rare in females (0%, 0%, and 2.8% in 26-week, 65-week, and 2-year studies, respectively). Ectopic sebaceous glands of the molar gingiva were very rare in both sexes. Ectopic sebaceous glands are often not noticeable on gross examination and are considered an incidental finding.

Recommendation: This finding should be diagnosed as "Oral mucosa, gingiva - ectopic tissue, sebaceous gland." No grade is necessary.

References:

Imaoka M, Satoh H, Kai K, Kajimura T, Furuhashi K. 2003. Spontaneous ectopic sebaceous glands (Fordyce's granules) in the oral mucosa of Sprague-Dawley rats. *J Toxicol Pathol* 16:253-257.
Abstract: <http://ci.nii.ac.jp/naid/10025851222>

Yoshitomi K, Brown HR, Eustis S. 1990. Fordyce's granules of the incisor and molar gingival in F344 rats. *Vet Pathol* 27:432-438.
Abstract: <http://www.ncbi.nlm.nih.gov/pubmed/2278131>

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