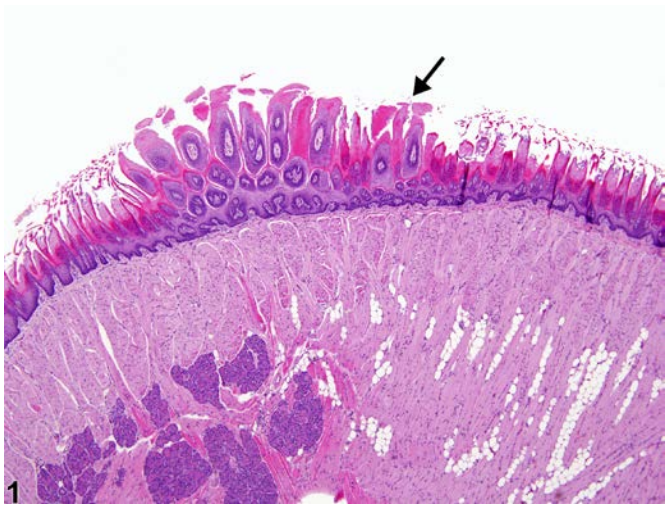
Tongue, Epithelium – Hyperplasia



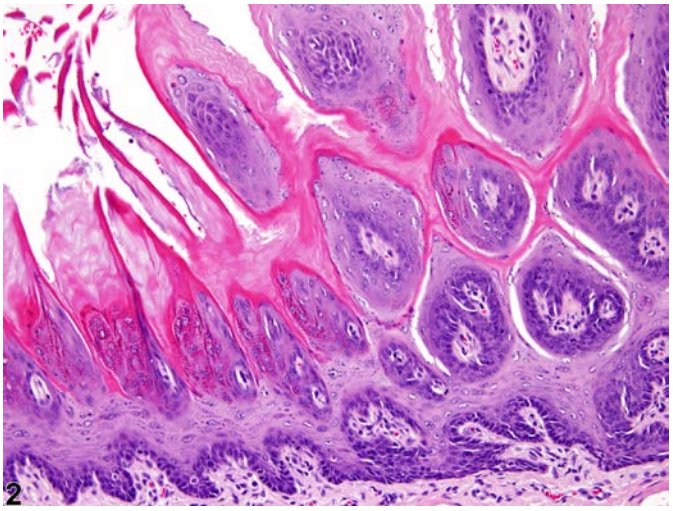
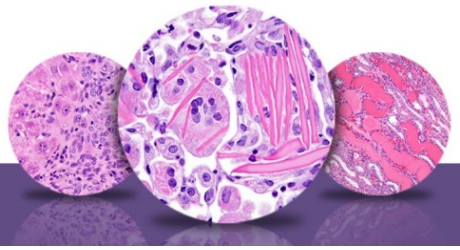


Figure Legend: Figure 1 Tongue, Epithelium - Hyperplasia in a female F344/N rat from a chronic study. A focus of epithelial hyperplasia is present on the tongue (arrow). **Figure 2** Tongue, Epithelium - Hyperplasia in a female F344/N rat from a chronic study (higher magnification of Figure 1). There are papillary epithelial projections in the focus of epithelial hyperplasia.

Comment: Squamous cell hyperplasia in the oral cavity is seen most commonly on the tongue, palate, and lateral wall of the pharynx. Squamous cell hyperplasia is characterized by increased cell numbers, which usually results in increased thickness of the squamous epithelium. Squamous hyperplasia may be diffuse or plaque-like or may form blunt papillary projections. Focal hyperplasia can have multiple finger-like projections, each with its own lamina propria (Figure 1 and Figure 2). Hyperkeratosis is frequently seen with squamous cell hyperplasia, but usually keratin pearl formation is not present. Size, the well-differentiated appearance of cells, and the absence of a prominent stromal component are important in distinguishing hyperplasia from papilloma. Papillomas frequently will have a single stalklike attachment to the tongue, which may not be in the plane of section. Proliferative lesions involving squamous epithelium tend to be on a continuum, progressing from focal hyperplasia to papilloma to squamous cell carcinoma. There are, however, examples of studies in which the papilloma stage was apparently bypassed, and progression was directly from focal hyperplasia to squamous cell carcinoma. Mechanical damage can result in ulceration or erosion of the hyperplastic epithelium and inflammation.



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Recommendation: Squamous hyperplasia should be diagnosed and graded based on the size and number of the areas affected and the thickness of the epithelium. Associated hyperkeratosis, ulceration, or inflammation should not be diagnosed separately unless warranted by severity.

References:

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