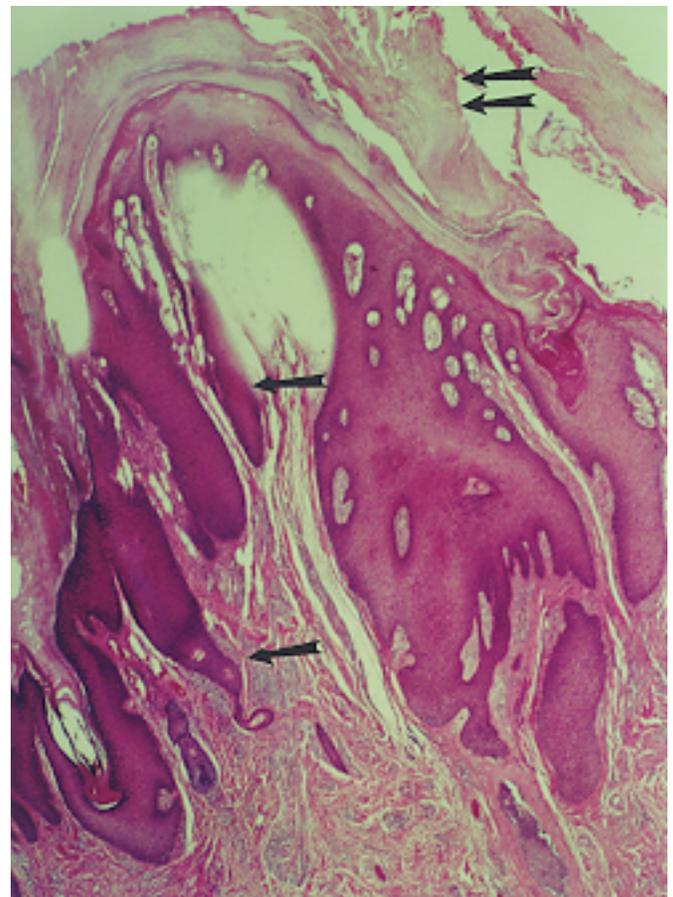


VERRUCAL KERATOSIS (PAPILLARY KERATOSIS)

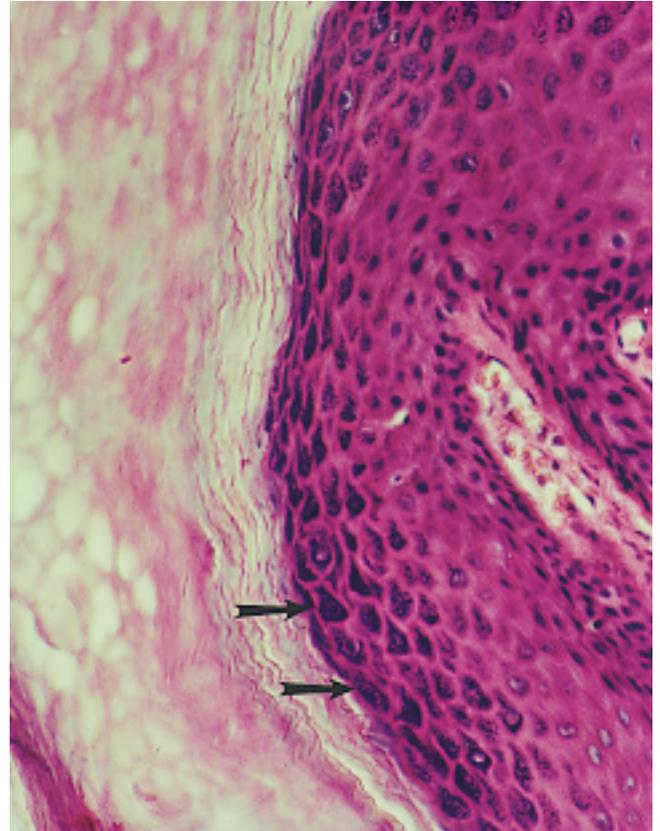
Keratosis refers to the presence of keratin on an epithelial surface, normal in some areas such as skin, and abnormal in others such as the larynx. Many keratoses, e.g., in the larynx, are flat, and may be described by the clinician as vocal cord nodule or leukoplakia. Microscopically there may be difficulty in distinguishing verrucal keratosis from verrucous carcinoma, especially in a small biopsy of the larynx.

Microscopically, verrucal keratosis shows a heavily keratinized surface. The presence of abundant keratohyalin granules in the stratum granulosum is characteristic and helps differentiate the lesion from verrucous carcinoma which characteristically demonstrates no granules, or few. Rete pegs in verrucal keratosis tend to be elongated, relatively thin and pointed in contrast to those of verrucous carcinoma which are elongated, bulbous and thick and appear to be “pushing.” Dysplasia may be present in verrucal keratosis but is lacking in verrucous carcinoma. Submucosal chronic inflammation is more marked in verrucous carcinoma than in verrucal keratosis. Koilocytosis (see “Wart” for illustration) is common in verrucal keratosis but usually absent in verrucous carcinoma.

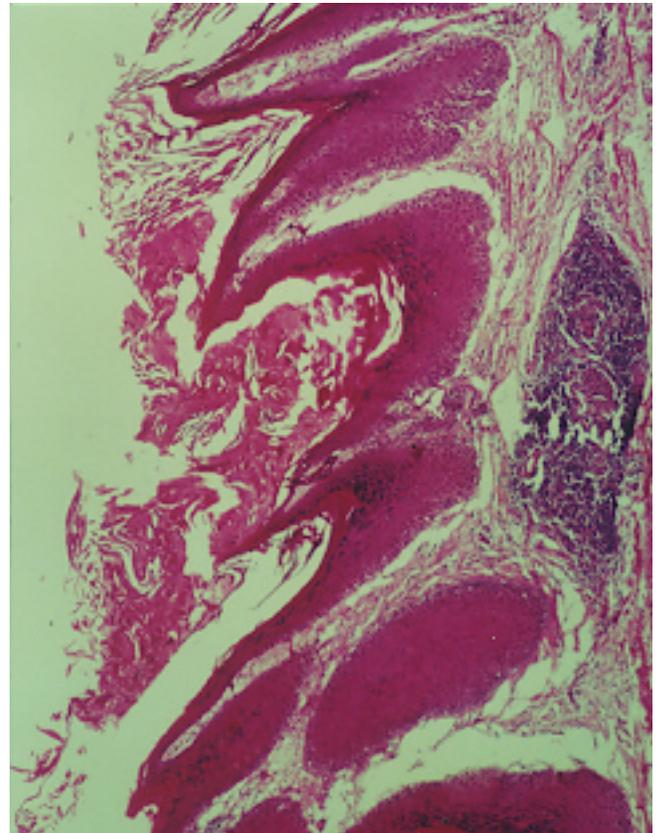
Verrucal keratosis, (hyperkeratosis) forehead. Note the heavily keratinized surface with papillary projections reminiscent of the “church spires” (double arrows) also described with verrucous carcinoma. Rete pegs are elongated, thin and pointed (single arrows).

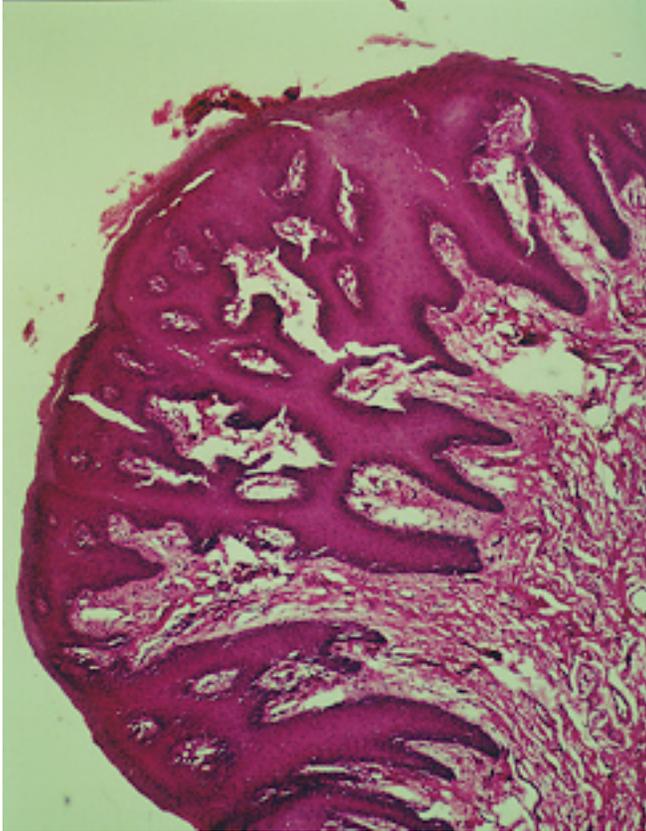


Verrucal keratosis, (hyperkeratosis) forehead. Extremely prominent collection of keratohyalin granules (arrows) in the granulosal cell layer that is generally absent in verrucal carcinoma. Keratin has formed abundantly on the surface.



Verrucal keratosis, gingiva. Church-spire like formation of keratin, relatively narrow rete pegs, and one isolated focus of inflammatory cells.





Verrucal keratosis, larynx. Pointy rete pegs as well as minimal inflammatory response, contrasts this lesion with verrucous carcinoma. Another term for these elongated rete pegs is pseudoepitheliomatous hyperplasia of the mucosa because it simulates invasive squamous cell carcinoma. In this section there is less keratin than is shown in the other examples.