Verrucous Carcinoma

Verrucous carcinoma is a very well differentiated squamous carcinoma. It metastasizes rarely but may become so large as to obstruct the laryngeal airway. The oral cavity also is the site of verrucous carcinoma and, in fact, any area of the upper aerodigestive tract may be affected. Grossly, there are shaggy, fungating masses sometimes as large as 10 cm., broadly attached to the true vocal cord, gingiva or buccal mucosa. The tumor occurs chiefly in men, usually over 50 years.

Microscopically, the uniform cells show none of the mitoses or dysplastic features expected with squamous carcinoma. The surface shows characteristic “church-spire” formations due to extensive keratinization. The rete pegs are rounded and bulbous and “push” into the stroma on a broad front. Again, there is no cellular atypia. Keratohyalin granules in the stratum granulosum are few or missing (in contrast to verrucal keratosis). A mixed chronic inflammatory reaction surrounds the rete pegs and may be marked.

Verrucous carcinoma, chin. Typical “church-spires” (arrows) composed of masses of keratin project upward from the tumor.
Verrucous carcinoma, bulbous rete pegs (arrows) with associated inflammatory response in the surrounding stroma. Note that the tissue does not appear dysplastic and there are no mitoses.

**Clinical Aspects**

In some patients lesions of verrucous carcinoma have been present for years, and multiple biopsies taken before identification was made. A deep enough biopsy to include underlying stroma is essential. Any marked dysplasia removes the lesion from classification as verrucous carcinoma.

Treatment by surgery is curative if the entire lesion is excised. Metastases are rare and then only to regional nodes. Sometimes the lesions may change to frankly invasive carcinoma and, at least in the past, irradiation therapy has been thought to promote such change.