

LOCALIZATION PATTERNS OF FIBRONECTIN (FN) IN VERRUCOUS CARCINOMA (V.C.) IN RELATION TO THE FINE MICROSCOPIC CHANGES

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ABSTRACT

For the present study, 13 cases of oral V.C were studied in order to investigate the variation in fibronectin (FN) expression in relation to the ultrastructural changes. With the aid of the transmission electron microscope (TEM), two grades of atypia could be identified. Overexpression of FN showed consistent localization patterns among both groups indicating a considerable role in regulating tumor growth. Increased immunoreactivity for FN in the epithelial cells was directly related to the grade of atypia. However, the relation was inversed when considering FN expression in fibrous tissue. It was concluded that The focal reduction of FN expression might be an early sign of impaired basement membrane structure with an impaired barrier function as a result. This may allow the diffusion of the released destructive mediators from the malignant epithelial cells without necessitating their mechanical migration toward the underlying structures. Thus, it was recommended to use FN and/or TEM in further evaluating cases of oral V.C.

INTRODUCTION

Verrucous carcinoma (V.C.) is an uncommon slow growing, variant of oral squamous cell carcinoma that is chiefly exophytic but can invade and destroy oral tissues. It typically presents as an extensive white, warty lesion of buccal mucosa or mandibular gingiva, although it also occurs at other sites (Neville, et al 1992).

The apparent clinical benignity of V.C. may lead to lengthy periods of misdiagnosis, during which it is likely not to spread to distant lymph nodes, but rather to destroy a nose, a mandible or any adjacent structure, as it slowly but relentlessly extends into underlying tissue. The persistent nature of the condition can make management dif-

ficult and the possibility of recurrent disease is high. (Jordan, 1995). Regional lymph node metastases are rare and are a late manifestation. To this day, biopsy errors are common and delay in diagnosis remains a problem, even with the presence of the interface of the tumor with the host in tissue sample. (Spiro, 1998). Of importance is the absence of anaplasia and a deceptive benign appearance and absence of significant dysplasia characteristic of other forms of malignancy. It grows as bulbous, well-differentiated epithelial masses extend into the submucosa, with margins that are blunted and pushing rather than narrow and infiltrative. The level of differentiation of the squamous element is high.

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