

EXPRESSION OF KI-67 ANTIGEN IN CYCLOSPORIN A INDUCED GINGIVAL HYPERPLASIA OF RENAL TRANSPLANT PATIENTS

Saber Hassaan, * Zeinab Darwish, * and Moustafa El-Shennawy **

ABSTRACT

The present study investigates the nuclear proliferating marker Ki-67 in cyclosporin A (CSA) induced gingival hyperplasia of 10 renal transplant patients (Group I). Other 10 patients with gingival hyperplasia due to local factors (Group II) were included. After thorough periodontal therapy and plaque control for 2-3 weeks, tissue specimens were taken from the gingiva of all cases, processed to paraffin sections and stained with H & E and anti-Ki-67 antibody using the streptavidin-biotin immunohistochemical technique. The results showed that, the staining of Ki-67 in the epithelium of the CSA-induced gingival hyperplasia was prominent and localized to the nuclei of basal and variable number of suprabasal cells. In the second group, the positive reaction was mainly in the nuclei of basal cells.

In conclusion, the results suggest that the proliferative activity of the surface epithelium in CSA induced gingival hyperplasia is more than that of the local factor-induced gingivitis. Therefore follow-up of the oral tissues in patients under CSA therapy is important to facilitate early diagnosis of any suspicious lesion.