

cyclosporine and fourth - daily dose of 175 mg of cyclosporine).

The concentration of cyclosporine in blood (C2) was determined through Fluorescence Polarization Immunoassay (FPIA). The bioptic material was stained with hemalaun eosine (HE) and analysed under a light microscope in order to count the apoptotic cells.

Results: We registered a significant increase of apoptotic processes in gingival epithelia of patients treated with the highest cyclosporine dose, compared to the other sub-groups and the control group ($p < 0,01$). There was an insignificant correlation between the concentration of cyclosporine in blood with regard to apoptosis ($p > 0,05$).

Conclusion: Apoptosis does not occur in a dose-dependant manner, it is rather a cause of the present inflammation in gingival stroma than caused by the work of cyclosporine in blood.

P040

Histochemical and immunohistochemical evaluation of primary and recurrent pterygium

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Objective: Pterygium is benign, fibro vascular and infiltrative process of the conjunctiva of unknown pathogenesis. Histochemical and immunohistochemical analysis of primary and recurrent pterygium.

Method: Histochemical and immunohistochemical analysis of pterygium tissue were done after the surgical excision with autotransplantation method with graft from the superior or inferior temporal bulbar conjunctiva. The patients were divided in 3 groups: 1. Group of 10 patients with primary-stationary pterygium 2. Group of 10 patients with primary-progressive pterygium 3. Group of 10 patients with recurrent pterygium Species of normal conjunctiva (10) were investigated also as a control group. All tissues were subjected to hematoxylin and eosin staining, immunohistochemical analysis using antibodies against EGF-R, vimentin, CD34 and CD 31 and histochemical staining with Van Giesson Elastica.

Results: The histological feature of pterygium overgrowth is excessive fibrovascular proliferation and basement membrane (Bowman's membrane) degeneration. All cases present with chronic inflammation reaction. The increased expression of EGFR proteins was present in pterygium. 8 of 10 pterygium express the stains of EGFR in full thickness

of epithelium with intensive staining more than in conjunctiva. CD34 positive cells were expressed in the basal epithelium and peri-vascular endothelium in primary pterygium, but more significant expression was found in recurrent pterygium. Immunoreactivity of vimentin was detected in miofibroblasts in fibrovascular tissues of primary and recurrent pterygium. Markers for vascular endothelial cells as CD31 + are increased in pterygia.

Conclusion: Although pterygium management has traditionally involving surgery the understanding of immunohistochemical events underlying pterygium pathogenesis may enable the use of less invasive treatment methods.

PS-09 DERMATOPATHOLOGY

P041

Prognostic factors for onset of metastases in malignant melanoma of the extremities

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Objective: The aim of this paper was to define the correlation between prognostic factors (separately or in combination) and onset of metastases in the regional lymph nodes.

Method: A total of 60 patients with malignant melanoma on upper and lower extremities were analyzed. Patients were divided into two groups: examined and control group, each consisting of 30 patients. The following parameters were analyzed: primary Breslow tumor thickness, Clark levels of invasion, lymphocytic infiltration, presence of ulcerations, presence of satellite lesions and their relation with onset of metastases in the regional lymph nodes.

Results: The analysis done with the chi-square test showed a positive correlation between onset of metastases and Breslow vertical melanoma thickness ($\chi^2=4.43$ $df=1$ $p=0.03$) and between onset of metastases and anatomical level of Clark skin invasion ($\chi^2=7.251$ $df=2$ $p=0.0266$).

Conclusion: Using multifactorial analysis of the combination of Breslow vertical tumor thickness, presence of satellite lesions around the primary tumor, Clark anatomical tumor invasion, and the less important factors - presence of ulceration and lymphocytic tumor infiltration, might predict with great probability the status of the regional lymph nodes in majority of the cases, but not in all.