THE EXPRESSION OF METALLOTHIONEIN COMPARED TO THE EXPRESSION OF Ki-67 PROLIFERATIVE ANTIGENS IN CELLS OF STRATIFIED NON-KERATINISING EPITHELIUM AND IN CELLS OF PLANOEPITHELIAL CARCINOMA OF THE UTERINE CERVIX

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The expression of metallothionein (MT) in the cells of various cancer types represents an unfavourable prognostic and predictive index. MT is supposed to participate in cell cycle regulation and in the resistance to cytostatic drugs. The expression of MT has been noted to highly correlate with proliferation intensity and with atypia of tumour cells. Our study aimed to determine the relationship between the intensity of MT expression and the intensity of the expression of the proliferative antigen, Ki67, in the cells of a normal stratified non-keratinising epithelium and in planoepithelial carcinoma of the uterine cervix. A series of immunocytochemical reactions using antibodies to MT and Ki67 (Dako, Poland) and employing the technique of double staining was performed on paraffin sections originating from 30 cases of planoepithelial carcinoma of the uterine cervix and on 30 normal fragments of the uterine cervix, isolated from patients who had been surgically treated in the Lower Silesian Centre of Oncology. The reactions revealed a positive correlation between the presence of the studied antigens in the tumour cells (p<0.05). No such correlation could be disclosed in the normal epithelium in which MT was present only in the basal cell layer. The results indicate that MT expression correlates with a low degree of cell differentiation but does not directly correlate with the proliferative activity of the cells.