ABSTRACT

In the last three years prostatic carcinoma reaches the first place in the ladder of number of new reported tumour diseases in male population. Although in most cases it is a relatively well curable affection, the research of new methods and procedures in the prostatic carcinoma diagnostics is very intensive, because the main point of successful therapy is the disclosure of early (curable) stages of disease. This graduate work gives the integral summary of histological and immunohistochemical methods, which are possible to be used in the prostatic carcinoma diagnostics.

Histological examination based on the appraisal of the cell shape and characteristic cell structures permits to pass a judgement over the presence or absence of tumour changes, which has a high diagnostic and prognostic value. In the cases where the classic histological analysis failed, the special immunohistochemical methods are used by the clinical workers.

Immunohistochemistry is based on the reaction of specific antibody and antigen, which has a receptor, enzymatic or transcription factor function in the cell and its presence (absence) or the expression intensity is characteristic for malignant or benign tissue which is examined. The content of this work is primarily synoptic enumeration of using immunohistochemical markers with their utility and notice value in prostate carcinoma diagnostics. The attention is also given to the practical use of immunohistochemistry in cases when it is impossible to distinguish benign hyperplasia and tumour of the prostate by classic methods.