

Abstract

The thesis “Clinicopathological, morphological, immunohistochemical and molecular biological features of tumours of genitourinary tract” includes seven commented articles from the area of genitourinary (GU) tract neoplasms. Due to the wide spectrum of tumours of the GU tract, the presented dissertation is limited only to morphologic, immunohistochemical and molecular aspects of renal tumours – in the field of pathology, we have observed fundamental changes in recent years and where molecular techniques have begun to play an integral role in pathological examination.

The introduction comments current 5th edition of WHO classification of kidney tumours, it emphasizes changes and new entities defined by distinctive morphology and molecular signature as well as comments on new insights in well-established entities.

In the results, there are presented recently published original publications describing variant morphologies of common tumours with their immunohistochemical and molecular profile, as well as newly describe entity with its immunohistochemical and molecular characteristics.

In the conclusion, dynamics of changes in renal tumours classification is discussed together with the importance of molecular testing, its therapeutic implications and limitations.