

Abstract

The dissertation called “Management of morphological diagnostics of molecularly-genetically defined tumors of the digestive tract” is an annotated file of a total of eight published works (four original works published in an English literature in an impact-factor journal, one letter to an editor in English language also having an impact factor, and three works in Czech language published in domestic reviewed journals: two of these are reviews of the literature, one is an original work).

Currently, molecular genetics is significantly entering the classifications of different tumor units and in some units it is undoubtedly becoming an integral part of the diagnostic algorithm; as a result molecular genetic traits of individual tumors are hardly to be ignored. In contemporary pathology, at the same time you may find the classifications based exclusively on morphological traits, but also the classifications mostly using molecularly-genetic traits (e.g. the classification of the central nervous system or hematological malignancies), as well as the classifications combining the both traits (part of renal neoplasia). For practical medicine it is however always necessary to find an intersection of the both approaches to ensure the correct and complete diagnosis for a patient.

Most tumors, especially those of gastrointestinal tract (GIT), are classified on the basis of morphology, another part with the help of immunohistochemical profile of the lesion, but GIT-tumors defined exclusively on the basis of molecular genetics are rather rare. And so the molecularly-genetic examination regarding GIT-tumors is used in total in three areas: 1) to determine the diagnosis (rarely), 2) for predictive diagnostics, 3) to diagnose hereditary tumors. It is however evident that in the near future, despite the great boom of the molecular genetics, the classical morphological approach will not be replaced, and the molecular genetics will become a mere integral part of both the diagnostic and the predictive approach to individual lesions. Based on the molecular-genetic traits, the defined tumor units are and probably will be rare, and an exclusive genetic approach to the diagnostics, at least in the years to come, will not be the main one.