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„The clinico-morphological study of focal liver lesions in young adults”

ABSTRACT

Focal lesions of the liver are a serious diagnostic, therapeutic and social problem. Thanks to the universal access to modern imaging examinations, they are diagnosed more and more frequently in increasingly younger patients.

The main aim of the study was the clinical and morphological analysis of histopathological diagnoses together with clinical data and the frequency of these lesions.

The most frequently diagnosed focal lesions in the group were hepatic metastases, then focal nodular hyperplasia, and the least common lesion hepatocellular carcinoma. Moreover morphology and phenotype of hepatocellular carcinoma were evaluated in young adults in the study group taking into account the participation of progenitor cells.

The material for the study were histopathological results and medical history of patients under 40 years of age with focal lesions of the liver treated surgically in the Department of General Transplantation and Liver Surgery of the Medical University of Warsaw and diagnosed in the Department of Pathomorphology of the Medical University of Warsaw during the period 2002-2012, parafin blocks collected for diagnostic purposes from patients under 40 with hepatocellular carcinoma and patients admission books of the Department of General Transplantation and Liver Surgery of the Medical University of Warsaw during the period 2010-2012.

The incidence of hepatocellular carcinoma in young adults does not show as significant correlation with cirrhosis or hepatotropic virus infection as in older patients. The lack of coincidence of both classic and fibrolamellar variants of this type of cancer in young people with HCV infection may indicate a different pathogenetic pathway.

In contrast, HBV infection is only associated with classical hepatocellular carcinoma. In search of etiological factors, the role of liver progenitor cells in the pathogenesis of these type of lesions was emphasized. My paper shows that the fibrolamellar type in comparison to the classical form of hepatocellular carcinoma, is characterized by an immunophenotype indicating a smaller proportion of cells with progenitor cell phenotype. Focal lesions, especially

fibrolamellar hepatocellular carcinoma or focal nodular hyperplasia growth were more common in young women.

GGTP enzyme is the most helpful liver enzyme in the diagnosis of focal liver lesions, whereas in the case of classical hepatocellular carcinoma AST is the most useful. In the case of fibrolamellar type, the most reliable enzyme is ALT. Focal lesions in young people are less common than in patients over 60, but their diagnosis and treatment should not differ significantly due to age.