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BIOCHEMICAL INVESTIGATIONS IN THE ASSESSMENT OF HEALTH RISKS FOR OVER 35-YEAR-OLD PATIENTS AFFECTED BY ENVIRONMENTS WITH HEPATITIS A VIRUS

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Abstract

Hepatitis A virus (HAV) is well known as a major public health problem, with a high index of occurrence especially in regions and environments with poor sanitation and water quality. From a biochemical viewpoint, acute hepatitis A virus infection is revealed by the considerably elevated serum transaminase levels and by bilirubin metabolism disorders, since it may often be clinically asymptomatic. Our paper is aimed at analyzing the evolution and significance of biochemistry tests for this type of infection in over 35-year-old patients in the Infectious Diseases Hospital of Iași, Romania (group 1 – 28 cases) as compared to younger patients (group 2 – 34 cases). The first group represents 7% of the total number of virus A hepatitis cases diagnosed in our hospital in 2015. The over 35-year-old patients came mostly from urban areas (78 vs. 25% in group 2, p=0.0001). The peak aminotransferases values were comparable in the two groups. The anicteric case percentage was significantly higher in the second group (44.3% vs. 3.6%, p<0.0001), whereas among the icteric cases, the cholestasis syndrome was more pronounced in the 1st group (peak total bilirubin values 9.1 vs. 4.1 mg/L, p<0.0001). The first group had more often severity markers and longer hospitalization periods (16.9 vs. 11 days, p=0.001). During the first month after hospital discharge, the first group included more patients with clinical symptoms or hepatocytolysis relapse (21.4 vs. 2.8%, p=0.04). Therefore, over 35-year-old adults make up a mere minority of the patients diagnosed with HAV in our hospital, as their clinical picture and laboratory variables are often different from the ones of pediatric patients; they distinguish themselves by a more important cholestatic syndrome, and by an extended, sometimes severe or undulating evolution. No significant differences were found between the patients in the two groups in what concerns the extent of the hepatocytolysis syndrome; Thus, these adults require a closer and prolonged medical monitoring and more intense therapy measures.

Key words: cholestase, hepatocytolysis, jaundice, transaminases

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