Tverezovska Iryna Ivanivna, Rozhdestvenska Anastasiia Olexandrivna

NON-INVASIVE DIAGNOSIS OF LIVER FIBROSIS IN PATIENTS WITH COMORBID COURSE NON-ALCOHOLIC FATTY LIVER DISEASE AND HYPERTENSION

Ukraine, Kharkiv
Kharkiv National Medical University
Department of Internal Medicine №1
Scientific advisor: Professor, D. med. sci., MD Zhelezniakova N.M.

Introduction. Non-alcoholic fatty liver disease (NAFLD) is a chronic disease, an independent risk factor for cardiovascular disease and a basis for the progression of all metabolic syndrome's manifestations (hypertension, insulin resistance, diabetes, etc.). The BARD scale is a prognostic model that, according to the literature, has a high sensitivity and specificity and can be used to assess the intensity of the liver fibrotic process in patients with NAFLD.

Goal. Estimation of the degree of intensity of liver fibrosis on the BARD scale in patients with NAFLD in combination with hypertension.

Materials and methods. We examined 49 patients of the main group with NAFLD in combination with hypertension (1-2 degrees and 1-2 stages), and 51 patients of the comparison group with isolated NAFLD. The control group consisted of 20 relatively healthy individuals. All groups are randomized by age and gender. The gender distribution was as follows: 33 (67.3%) women and 16 (32.7%) men in the main group, 30 (58.8%) women and 21 (41.2%) men in the comparison group and 11 (55.0%) women and 9 (45.0%) men in the control group ($\chi 2 = 1,219$, p = 0,544.). The median age of patients in the main group was 51.0 years [45.0; 56.0], in the comparison group 52.0 years [47.0; 54.0] in and 51.0 years [45.0; 55.5] in the control group. BMI in the control group was 24.5 kg/m2 [23.5; 24.8]; in the main group – 24.9 kg/m2 [24.2; 25.9]; and in the comparison group –.24.6 kg/m2 [23.1; 25.7]

We measured alanine transaminase (ALT) and aspartate transaminase (AST) all patients by standard methods (kinetic method). BMI was calculated according to the formula: body weight (kg)/ height (m) ^{2}. The presence of diabetes was determined from the anamnestic data of patients and fasting glucose and glycated hemoglobin (HbA1c) levels. Calculation on the BARD scale, included an assessment of 3 parameters: the ratio of ACT to ALT $\geq$ 0.8 - 2.0 points; BMI $\geq$ 28 kg / m2 - 1 point and the presence

of type 2 diabetes - 1 point. The possible range of points on the scale was 0-4. Values 0–1 were attributed to a low probability of intensive liver fibrosis; 2 and more - the likelihood of significant liver fibrosis. Logistic regression analysis was used to determine the association between the degree of liver damage and concomitant hypertension.

Results. The calculation on the BARD scale determined that in the main group there were 43 (87.0%) persons with a high possible risk of fibrosis, and in the comparison group - 41 (80.0%) persons with a high possible risk of fibrosis ($\chi2 = 4,221$; $p = 0.027$). Further analysis showed that patients with pre-existing hypertension were almost 75% more likely to have intense fibrosis than patients with isolated NAFLD: OR = 0.255 [95.0% CI 0.066–0.992], p = 0.049. Correction for sex and age of patients slightly increased the association of concomitant hypertension with the intensity of the fibrotic process: OR = 0.209 [95.0% CI 0.051-0.863], p = 0.030.

Conclusions. The BARD scale can used at management of different stages in patients with NAFLD. It is an effective tool for outpatient assessment of the risk and fibrotic process intensity in the liver and can be a dynamic marker of this process. The presence of concomitant hypertension adversely affects the course of NAFLD, causing an increased risk of liver fibrosis in such patients.

Авдєєнко Олександра Ігорівна
ЕКСТРАПУЛЬМОНАЛЬНІ ТА АТИПОВІ ПРОЯВИ COVID-19:ОГЛЯД ЛІТЕРАТУРИ
Україна, Харків
Харківський національний медичний університет
Кафедра внутрішньої медицини №2, клінічної імунології та
алергології імені академіка Л.Т.Малої
Науковий керівник: Молотягін Дмитро Геннадійович

7 січня 2020 року новий коронавірус (SARS-CoV-2) був визнаний причиною декількох випадків захворювання на пневмонію, зареєстрованих наприкінці 2019 року в м. Ухань, Китай. Вірус швидко поширився, викликавши епідемію на всій території Китаю, а потім безліч випадків захворювання та інших країнах по всьому світу. Клінічні ознаки коронавірусної інфекції широко варіюють від безсипмтомного прояву до гострої пневмонії з дихальною недостатністю і навіть