

ALCOHOLIC CIRRHOSIS OF THE LIVER AND DISARRANGEMENT OF PLASMA ATHEROGENIC FACTORS

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Alcohol is metabolized by alcohol-dehydrogenase into acetaldehyde, and by aldehyde-dehydrogenase and acetyl-coenzyme-A into acetate. Thus produced hydrogen is accepted by nicotinamide-adenine-dinucleotide, which leads to the accumulation of fatty acids in the liver. Cirrhosis of the liver develops due to the intake of alcohol, 80g/day for men and 20g/day for women. The aim of this study was to determine the profile of plasma atherogenic factors in patients with alcoholic cirrhosis of the liver, compared to patients with HCV-cirrhosis, and to determinate their diagnostic significance. The study compared a total cholesterol (TC), triglycerides (Tg), high-density-lipoprotein-cholesterol (HDL-C), low-density-lipoprotein-cholesterol (LDL-C), and apolipoproteins (ApoA1 and ApoB) in plasma of patients with alcoholic cirrhosis compared to patients with HCV-cirrhosis. The values of TC/HDL-C, ApoB/ApoA1 and LDL-C/HDL-C were calculated and compared in both groups. The study included 37 patients with alcoholic cirrhosis, mean age 52.65 years (SD-6.73), who consumed alcoholic beverages during an average of 8.67 years (SD-1.96) and 35 patients with HCV-cirrhosis. There were 21.62% of women and 78.38% of men with alcoholic cirrhosis, and 34.29% of women and 65.71% of men with HCV-cirrhosis. The average values for the following parameters in alcoholic cirrhosis were obtained: TG 11.91mmol/l (SD-2.51), TC 14.63 (SD-2.62), LDL-C - 8.77 mmol/l (SD-2.19), HDL-C 0.41 mmol/l (SD-0.09), apolipoprotein-B 4.01g/l (SD-0.18), apolipoprotein-A1 0.51g/l (SD-0.08); in HCV-cirrhosis, the average values of the studied parameters were as follows: TG 8,62mmol/l (SD-2.31), TC 9.67 (SD-2.39), LDL-C 6.12 mmol/l (SD-1.78), HDL-C 0.76 mmol/l (SD-0.09), apolipoprotein-B 2.38g/l (SD-0.16), apolipoprotein-A1 0.98g/l (SD-0.05). The apolipoprotein-B/apolipoprotein-A1 relation can serve as a diagnostic marker for the presence of alcoholic cirrhosis, and is a better indicator of atherogenic risk. *Acta Medica Medianae* 2016;55(3):38-43.

Key words: alcohol, cirrhosis of the liver, atherogenic, plasma