

Biochemical parameters study of serum, an ascetic fluid in decompensated cirrhosis

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Abstract.

We have selected a group of 15 patients with decompensate cirrhosis for which we performed the following biochemical investigations in serum and ascitic fluid: ALT, AST, AST/ALT, LDH, Fe, BT, BD, BI, GGT, ALP, protein electrophoresis, CRP, CHE, ALB, CT, TG, Glu, AMY, CPK, urea, Cr, AcU. In the context of necrotic lesions and hepatic fibrosis, the de Ritis ratio has an increasing tendency in serum but also in ascitic fluid. The normal values of total LDH activity from serum and ascitic fluid do not exclude the pathological values of the LDH₄ and LDH₅ isoenzymes which imply the intensification of the anaerobic glycolysis from the cirrhotic liver tissue. The hepatic failure and the mesenchymal inflammation are also expressed by the A/G ratio from the ascitic fluid. The sensitivity to the oxidative stress grows as the hepatoprive and excreto-biliary syndromes (parenchymal decompensation) are more pronounced. The differences without statistical significance for urea, creatinine and uric acid values from serum and ascitic fluid prompt us to consider that the renal failure in decompensate cirrhosis can be established from only the behavior of these analytes in ascitic fluid. The level of AcU is high both in LA and in serum, which makes us consider that xanthinase too has higher activity and the superoxide radicals produced by the enzyme are in a higher level.

Abbreviations: A/G-albumin-globulin ratio, AcU-uric acid, ALB-albumin, ALP-alkaline phosphatase, ALT-alanine amino transferase, AMY-amylase, AST/ALT-de Ritis ratio, AST-Aspartate Amino Transferase, AT-aminotransferase, BD-conjugated bilirubin, BI - nonconjugated bilirubin, BT-total bilirubin, CH-cirrhotic hepatitis, CHE-cholinesterase, CPK-creatine phosphokinase, Cr, Creatinine, CT-total cholesterol, ELFO-protein electrophoresis, Fe-iron, GGT-gamma glutamyltranspeptidase, Glu-glucose, HTP-portal hypertension, LA-ascitic fluid, LDH-Lactate Dehydrogenase, M-witness, P-patient, TG-triglycerides.

Key words: decompensate cirrhosis, HTP, LA, AST/ALT, A/G, CT, Urea, Cr, AcU.