GLUTATHIONE S TRANSFERASE AND ITS ALPHA ISOFORM IN HEPATITIS C SEROPOSITIVE EGYPTIANS

EHAB MOHAMED ABDEL-REHIM

The diagnostic problem of acute and chronic hepatitis had not been resolved. The sensitivity as well as specificity of different chemical and biochemical assessments are highly variable. The potential importance of HCV as a cause of liver disease in Egypt has been noticed. Rate of 11-22% seropositivity were reported among volunteer blood donors in different studies started from 1989 till now. So the different studies for evaluation of the sensitivity of different clinical chemical assessment of such disease carry special national importance.Glutathione S transferases are a family of multifunctional detoxifying enzymes that catalyses the conjugation of glutathione with large number of compounds bearing an electrophilic center, including carcinogens, and also bind a variety of non-substrate ligands. The Glutathione S transferases are widely distributed in the mammalian species and can be grouped into 3 classes on the basis of subunit composition: alpha a(basic), mu p. (neutral) & pi n (acidic).The liver is an organ possessing abundant GST-a (3 mg/g wet weight).Glutathione S-transferase alpha (GST-a) is a cytosolic enzyme of a short plasma half-life of 2 hours. Since no clinical conditions other than hepatic diseases are known to cause raised plasmaconcentration of GST-a, plasma measurements of this enzyme may therefore provide a fast, specific. and sensitive index of acute hepatocellular damage. Its measurement might provide an earlier and much more sensitive indicator of acute hepatocellular damau.e, as well as of its resolution in different clinical conditions than the aminotransferase. This present work designed to compare the sensitivity: of GST total and GST-a in comparison with other clinical chemical assessment in common practice (ALT, AST, total and direct bilirubin, alkaline phosphatase and hOT.