INTRODUCTION AND AIM OF THE WORK

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 ***(Saeed et al., 1991; Kamel et al., 1992; Darwish et al., 1993 and Hibbs et al., 1993).***

Also ***El-Zayadi et al. (1992)*** reported that anti-HCV was detected in about 66.8% of 160 cases of NANB chronic liver diseases.

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 α (basic), mu μ (neutral) & pi π (acidic). The liver is an organ possessing abundant GST-α. GST-μ is also present in the liver & lymphocytes, but this is absent in approximately 50% of the human population. GST-π (originally found in the placenta) is widely located in the lung, kidney, GIT, erythrocytes and cancer cells ***(Sugimoto et al., 1995).***

Glutathione S-transferase alpha (GST-α) is a cytosolic enzyme found in high concentration in the liver (3 mg/g wet weight) with a short plasma half-life of 2 hours. Since no clinical conditions other than hepatic diseases are known to cause raised plasma concentration of GST-α, plasma measurements of this enzyme may therefore provide a fast,

specific, and sensitive index of acute hepatocellular damage *(Beckett & Hayes, 1993).*

Measurement of plasma GST-α might provide an earlier and much more sensitive indicator of acute hepatocellular damage, as well as of its resolution in different clinical conditions than the aminotransferase. Better assessment of severity of hepatic involvement is likely to improve clinical management *(Steegers et al., 1995).*

Nelson et al. (1995) examined α glutathione serum level in 96 patients with chronic HCV infection. Their study showed that α glutathione S transferase may be a good serologic marker of hepatocellular damage, because of its low molecular weight, uniform hepatic distribution, high cytosolic concentration and short half-life.

Aim of the work:

To evaluate the glutathione as a liver marker in its total and α isoform, in comparison to other conventional liver function tests in hepatitis C seropositive patients.