Activity of Serum Angiotensin-Converting Enzyme As a Tumor Marker Of Hepatocellular Carcinoma

Thesis

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SUMMARY AND CONCLUSION

Investigations of serum angiotensin converting enzyme value (SACE) have shown that it varies in different types of liver diseases.

It was found that its value increases in patients with viral hepatitis and liver cirrhosis.

Recent studies point to a significant decrease of SACE value in patients with cancers of various locations, thus suggesting the possibility of the clinical use of SACE evaluation as a tumor marker.

The aim of this study was to determine the changes in SACE values in patients with hepatocellular carcinoma (HCC) and liver cirrhosis.

In the present study two tumor markers, alpha-fetoprotein (AFP) and ACE were estimated in 30 patients with HCC. They were selected from department of Gastroenterology-Hepatology in Kasr el-Aini hospital during 2002. The study included also 30 patients with liver cirrhosis and 30 healthy volunteers as controls. SACE activity was determined by a spectrophotometric method.

It was found that the mean value of SACE was statistically significantly lower in HCC patients compared to those with liver cirrhosis and control group.

The mean value of SACE in grade III HCC patients was statistically significantly lower than those with grade I and II.

No correlation could be found between AFP and the pathological grade of HCC.

Also, no correlation was found between AFP or ACE levels in relation to patient's age and number or size of hepatic focal lesions.

Negative correlation was found between ACE and AFP levels in this study.

The sensitivity of ACE was found to be higher (93.3%) than that of AFP (56.7%).

Thus, ACE was more sensitive in diagnosis of HCC than AFP even in those whose

AFP values did not suggest the presence of the tumor.