INTRODUCTION

Hepatocellular carcinoma (HCC) is the most frequent complication and relevant cause of death in patients with compensated cirrhosis of any etiology ***(Sangiovanni et al., 2004)***.

Its incidence is increasing worldwide ranging between 3% and 9% annually ***(Velazquez et al., 2003***). In Egypt, HCC was reported to account for about 7.2% of chronic liver disease CLD patients ***(EL-Zayadi et al., 2005).***

The prognosis of patients with primary hepatocellular carcinoma (HCC) is generally very poor with a 5-year survival rate of less than 19%-15% since most of them are diagnosed at their late stage using current strategy ***(Kawano et al., 2008 and Stefaniuk et al., 2010).***

Current diagnosis of HCC relies on clinical information, liver imaging and measurement of serum alpha-fetoprotein ***(Gupta et al., 2003 and Marrero, 2005).***

Alpha-fetoprotein is the most useful tumor marker for the diagnosis and follow up of HCC. AFP is a glycoprotein expressed during the early stages of fetal lever development by the endodermal cells of the visceral yolk sac and in patients with testis tumor and during hepatocarcinogenesis ***(Sato et al., 1993).***

AFP is not elevated in all patients with HCC. Some patients with cirrhosis and/or hepatic inflammation can have an elevated AFP even without the prescence of a tumor. The test had a sensitivity of 39% - 95%, a specificity of 76%-94% and a positive predictive value of 9% - 50% for the presence of HCC in previously published studies ***(Daniele et al., 2004).***

Chromogranin-A(CgA) is a 50 Kd acid glycoprotein originally described in catecholamine storage vesicles of the adrenal medulla ***(Blaschko et al., 1967).***

It has a wide distribution in secretory vesicles of the endocrine, neuroendocrine and nervous system, where it is co-stored and co-secreted with hormones and neurotransmitters ***(Mouland et al., 1994).***

It is present in low concentration in the serum of healthy individuals, while high serum levels represent a sensible marker of carcinoid like tumors and neuroendocrine tumors (***Stridsberg et al., 1995, and Nobels et al., 1997).***

Cluster of cells containing CgA have been demonstrated within HCC tissues ***(Tajima et al., 1992 , Roskams et al., 1993 and Nakajima et al., 2000).*** Previous studies reported high serum CgA values in patients with HCC suggesting that CgA might represent a useful marker for HCC ***(Leone et al., 2002)***.