A study of risk factors of hepatocellular carcinoma among Egyptian patients

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Abstract

Background: The development of hepatocellular carcinoma is a multistep process and the result of an accumulation of risks. Many factors may therefore contribute to the final common pathway of HCC. Our aim was to determine the risk factors for the development of hepatocellular carcinoma so that we will be able in future to put a strategy to prevent HCC in Egypt. Patients and methods: This study was conducted on sixty cases of HCC as well as thirty patients with liver cirrhosis and another thirty healthy subjects without evidence of chronic liver disease. They were clinically assessed and investigated (Laboratory including complete blood count, liver biochemical profile, viral markers, alpha fetoprotein, anti Schistosomal antibody and serum aflatoxin, and imaging that was mainly by abdominal ultrasonography). Results: HCV had a high prevalence among HCC cases while HBV had a declining role. Aflatoxin showed a significant role in pathogenesis of this malignancy. HCC commonly presented in males, farmers, heavy smokers and was associated with high incidence of unsafe water supply and exposure to pesticides. The majority of HCC cases (65%) had a single major risk factor, and few cases (8.3%) developed HCC on top of non-cirrhotic liver. Conclusion: HCC is multifactorial with interaction of major risk factors like HCV and aflatoxin, minor risk factors like exposure to pesticides and heavy smoking in pathogenesis of this malignancy. HBV infection, which is one of the major risk factors, was found to have a declining role in hepatocarcinogenesis in this work. Also, HCC may occur on top of non-cirrhotic liver certainly with viral hepatitis.

Keywords
Hepatocellular carcinoma, risk factors, HBV, HCV,