Expression of intrahepatic HBsAg in HBV-associated HCC tissues

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Hepatocellular Carcinoma (HCC) is the fifth most common cancer in men and the ninth in women, as well as the second leading cause of cancer-related death globally. Almost 50% of all cases of HCC are associated with chronic infection with hepatitis B virus (HBV). Serum hepatitis B surface antigen (HBsAg) is an important diagnostic marker of HBV infection. This study aimed to investigate relationships between serum HBsAg and intrahepatic HBsAg in HBV-associated HCC. Serum HBsAg was detected by chemiluminescent microparticle immunoassay. Intrahepatic HBsAg was determined by immunohistochemistry (IHC) in formalin fixed paraffin embedded (FFPE) tissues (matched non-cancerous and HCC tissues) from 88 patients, whose serum HBsAg was positive in 56 patients (63.64%). In serum HBsAg-positive group, intrahepatic HBsAg was positive-staining in 73.2% of non-cancerous tissues, but only in 10.7% of HCC tissues. Significant correlation between serum HBsAg and intrahepatic HBsAg was observed in non-cancerous tissues (p<0.001), but not in HCC tissues (p=0.415). We concluded that intrahepatic HBsAg in HBV-associated HCC tissues was detected by IHC at significantly lower frequency than in non-cancerous tissues. This warrants further investigation into other biomarker(s) of HBV infection in HBV-associated HCC tissues, which might provide more information for insight into the development and progression of HBV-associated HCC.

Biography
Ravat Panvichian has completed his MD from Mahidol University. He is the Medical Oncologist of Faculty of Medicine, Ramathibodi Hospital under Mahidol University. He is interested in Hepatocellular Carcinoma (HCC) research.

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