Hepatitis B virus among Libyan health care workers

Dear Sir,

Serological investigations on hospital employees at the Tripoli Central Hospital and Tripoli Medical Center, point to high hepatitis B virus (HBV) infection.¹ Undoubtedly, strict policies on sharps, education and health insurance would address hospital personnel in Tripoli and reduce future acquisition of HBV. Nevertheless, authorities should offer HBV vaccination to all those negative for serological markers of hepatitis B surface antigen, hepatitis B surface (HBs), (HBsAg), anti-hepatitis B core (HBc) and anti-HBs. The vaccination should be monitored serologically to ensure there is no non-All the HBsAg carriers should be responders. followed longitudinally for early signs of hepatic malignancy. A semiannual screening for elevated alpha-fetoprotein level among carriers proved effective in detecting primary hepatocellular carcinoma at a potentially curable stage in Alaska. During a 26-month period 3387 alpha-fetoprotein estimations were performed on 1394 persons. Nine males were detected with values exceeding 350 ng/ ml. In 4 cases, surgical resection of small tumor mass less than 6 cm was associated with a return to normal alpha-fetoprotein level.² Furthermore, utility of alpha-fetoprotein assay and ultrasonography in early detection of primary hepatocellular carcinoma was evident in a 2.75 year prospective study in 160 cirrhotics. Eight with tumor less than 2 cm.³ The 7 employees who were positive exclusively for anti-HBc may have been infected with HBV long ago and either failed to develop anti-HBs or such levels fell to an undetectable level. Alternatively, they may have

been low level carriers with an undetectable level of HBsAg or those without excess production of HBsAg.⁴ Quantification of anti-HBc level or assay for HBV deoxyribonucleic acid (DNA) would detect any low level carriers or those without excess HBsAg in the blood. Last but not least, chronic HBsAg carriers could be examined for hepatitis B e antigen and HBV DNA to plan anti-HBV therapeutic intervention in those with active viral replication. A combined strategy of prevention of infection by vaccination, ultrasonography and alpha-fetoprotein assay or a therapeutic intervention with interferon/ lamivudine would be ideal for hospital personnel in Tripoli and elsewhere in Libya. Certainly, it could be emulated by other hospitals in Libya and extrapolated to the public in phases

Subhash Arya

Centre for Logistical Research and Innovation M-122 Greater Kailash-part 2 New Dehli 110048 India

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