

General Discussion

Dr A. S. McNeish, Birmingham, asked what, if any, relationship existed between persistent antigenaemia and antibody levels in hepatitis B infection? Professor Krugman replied that in individuals who had viral hepatitis type B and lose their antigen, antibody can be detected to the hepatitis B antigen in roughly 80% of cases. In most of these the antibody persists. It may become undetectable but reappear following exposure. In individuals who are carriers, however, it is the exception rather than the rule, to detect antibody to the antigen.

Recent studies by Barker and his colleagues (Hoofnagle, Garraty and Barker, 1973) have shown that anticore antibody is to be found in all chronic carriers but in their series they did not detect any with anti-coat antibody. At present no evidence was available which indicated the role of the core particle or of anticore antibody in the transmission

of hepatitis from the hepatitis B positive mother to her infant. The relative infectivity of the coat antigen and the core antigen was not clear. Hepatitis B antigen positive material will cause hepatitis in susceptible individuals whether or not Dane particles can be seen. Professor Krugman emphasized that very little hepatitis virus given parenterally could infect a susceptible individual. In chimpanzee studies it had been found that the Willowbrook MS 2 strain diluted to 10^{-6} was still highly infective in minute quantities.

Dr Cossart stated that electron microscopy of the cord blood of hepatitis B antigen positive mothers had shown no particles.

Reference

HOOFNAGLE, J.H., GARRATY, R.J. & BARKER, L.F. (1973)
Antibody to hepatitis B virus core in man. *Lancet*, ii, 869.