OP3.8 HIGH LEVELS OF NATURAL HBSAB IN NEWBORNS IN INDIA - PROTECTION AGAINST HEPATOCELLULAR CARCINOMA?

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Introduction: 4% Indians are HBsAg carriers. Extrapolating data from Taiwan it is estimated that 250,000 die each year of hepatocellular carcinoma (HCC). However the Cancer Registry shows only 5000 die. The risk of chronic infection depends on age of getting infected - 90% at birth and 2% among adults. This study looked at protection in babies immunized at birth compared to those whose vaccinated later.

Method: A case control study was done. The history of vaccination was obtained in 2671 babies and they were tested for HBsAg, HBcAb and HBsAb. Cases: Children who got infected evidenced by HBsAg or HBcAb . Controls: Those negative for both HBsAg and HBcAb. Exposed are those not vaccinated. Unexposed are those fully vaccinated with 3 doses of the vaccine. In one analysis unexposed were those vaccinated completely starting at birth.

Results: The HBsAg carrier rate in completely vaccinated starting at birth was 1.59% which was not significantly in those without birth-dose. (1.59% vs 1.31%, p value 0.6791). Infection (HBsAg or anti HBcAg) was also not statistically different (2.72% against 3.21% (p 0.6515).

Protective antibody HBsAb was present in only 70% of the vaccinated. In the unimmunised too naturally acquired HBsAb was present in over 40%. Protection gradually reduced with age.

Conclusions: Hepatitis B carrier rate is not reduced by the birth dose. This may be a result of the transfer of passive immunity from mother to child. A large number of babies had natural acquired HBsAb. Immunization may reduce this natural immunity. It must be investigated if this will paradoxically increase HCC.