

PATFERN OF HBs/HBe ANTIGENAEMIA IN PREGNANT WOMEN

Pages with reference to book, From 160 To 160

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Chronic asymptomatic HBs Ag carrier mothers and those who get acute hepatitis B during later part of pregnancy may transmit HBV infection to their newborn¹. The chances of vertical transmission increase if mothers are HBe Ag positive also^{1,2}. This report presents data on HBs/HBe antigenaemia in mothers and its relationship to the transmission of HBV to babies at birth.

SUBJECTS, METHODS AND RESULTS

One thousand pregnant women belonging to upper and upper-middle socio-economic class admitted at term to Aga Khan Maternity Home, Karimabad were screened for HBs Ag by reversed passive haemagglutination (Green Cross Corporation, Japan). HBs Ag positive sera were tested for HBe Ag by passive haemagglutination technique. Sera obtained from venous blood samples of babies born to all HBs Ag carrier mothers were tested for HBs Ag. Follow up of babies could not be done due to non cooperation of mothers and inadequate addresses. Of 1000 pregnant women tested 39 (3.9%) were HBs Ag positive and 6(15.4%) of these were HBe Ag positive. None of the babies born to HBs Ag carrier mothers had HBs antigenaemia at birth.

COMMENTS

Rate of transmission of HBV from carrier mothers varies from 0% in Europeans, 7.8% in Indo-Pakistanis to 61.3% in Chinese¹. In an earlier study from this Centre 8.9% pregnant women were HBs Ag positive by RIA. Difference in the antigen status in two studies may be due to the difference in the techniques used and the socioeconomic status of mothers at Jinnah Postgraduate Medical Centre³ and Aga Khan Maternity Home. An HBs Ag positive cord blood is suggestive of in utero infection. Eleven per cent of cord blood specimens were HBs Ag positive in our previous study³ but some of these babies may not have become carriers¹. Babies are at a greater risk of infection if mothers are HBe Ag positive². With 15% HBe Ag positivity in mothers the perinatal transmission to new born Pakistanis may be quite significant. It is therefore presumed that ultimate impact of HBV related liver disease on Pakistani population will be overwhelming if HBV infection is not prevented by instituting an effective immunisation programme for babies of carrier mothers.

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