

HEPATITIS

Supporting information

Immunisation should be given within 24 hours for infants of HBsAg positive mothers? Infants of mothers testing positive for HB_eAg should be given IVIG in addition? Infants with hepatitis C should be given interferon?

A systematic review of 29 RCTs (Lee, 2006) found that immunisation within 24 hours of birth reduced the occurrence of hepatitis B compared with placebo or no intervention (RR 0.28, 95% CI 0.20 – 0.40).

In a small uncontrolled study of 41 infants of HBsAg positive mothers (Reesink, 1979), 21 were immunised within 48 hours of birth and 20 were not treated. None of the treated group became HBsAg positive, compared with 5 of the untreated group ($p < 0.02$). Two of 3 infants who were not immunised until the fourth or fifth day after birth also became HbsAg positive.

A RCT in 117 infants (Beasley, 1981) took care to ensure that immunisation occurred as soon as possible after birth (usually within 1 hour). Follow-up continued for at least 15 months, during which time 91% of the 35 infants given placebo became HbsAg positive. This compared with 45% in the 42 infants who received a single dose of HBIG at birth, and 23% of the 40 infants given a course of 3 treatments at birth, 3 months and 6 months. The authors concluded that “Presumably...the earlier administration occurs the better.”

Passive immunisation alone was available in the first six months of life until 1985, when hepatitis B vaccine was first licensed for infants below this age (Polakoff, 1988). Active immunisation was subsequently started at birth.

The presence of HB_eAG in the mother is indicative of more severe infection and consequently, the infant may be given 200 IU of HBIG as additional protection (Wallis, 1999).

No controlled trials of interferon therapy in children with hepatitis C had been carried out by 1998 (Anon, 1998), nor can any be identified since. A Belgian review (Stephenne, 2002) states that “Treatment with interferon alone is poorly efficient” and suggests that, in selected cases, a combination of interferon and Ribavirin may be used, as a higher viral eradication rate has been achieved in adults in this way.

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Evidence Levels: I; II; V

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