



C-Gen 3 Hepatitis B

The incidence of Hepatitis B carrier status in the healthy general community is approximately 1% and that of "at risk" groups are considerably higher.

The risk of transmission (seroconversion) from a needle stick injury from a carrier source who is HBsAg positive is in the order of 30% for an HBeAg (-) source and 50% for an HBeAg (+) source.

As a consequence, it is the opinion of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) that:

1. All medical practitioners and para-medical personnel who are likely to come into contact with body fluids from patients should be vaccinated.
2. All pregnant women should be screened. The standard test available to determine the hepatitis B antigen (HBsAg) status of patients is the enzyme immunoassay (EIA or ELISA).
3. As part of the childhood vaccination programme, all infants are offered HBV vaccine (4 dose course). These are to be given at birth, 2 months of age, 4 months of age and either 6 or 12 months of age.

For pre-term infants, an extra dose should be given, so that the doses are given at birth, 2 months, 4 months, 6 months and 12 months OR delay until 2 months of age and give at 2, 4, 6 and 12 months of age.

See link to Australian Immunisation Handbook 9th Edition (2007) below.

4. Where the HBsAg Status of a pregnant woman is positive
 - a. Further testing should be performed to ascertain whether the woman is a high or low risk carrier. The risk of vertical transmission is 5-20% if HBeAg is negative and 70-90% if HBeAg is positive.
 - b. Liver function tests may be repeated every trimester.
 - c. Avoid fetal scalp electrodes and fetal scalp blood sampling. These procedures may increase the risk of neonatal infection.
 - d. Approximately 90% of neonates of HBsAg carrier mothers with a positive HBeAg will become carriers and have a 25%-30% lifetime risk of serious liver disease if no immunoprophylaxis is given. Thus, all neonates born to HBsAg positive mothers, and other babies at high risk, should receive active and passive immunisation. These measures have a 90% efficacy in reducing perinatal transmission of HBV.

i. ***In Australia***

At birth, Hepatitis B immunoglobulin is recommended to be given within 12 hours of birth. Its efficacy is markedly reduced if administration is delayed beyond 48 hours of age. Hepatitis B vaccine (1st dose monovalent) can be given at the same time and should not be delayed beyond 7 days of age. Three doses of multivalent vaccine at 2, 4, 6 or 12 months (timing dependent on combination vaccine used) to complete a 4-dose course is recommended.

ii. ***In New Zealand***

Hepatitis B immunoglobulin and Hepatitis B vaccine is recommended at birth (monovalent). Immunisation with a Hepatitis B multivalent vaccine is then recommended at 6 weeks, 3 months and 5 months. (See link below to NZ immunisation schedule)

- e. Bathe the baby to remove any maternal body secretions and blood prior to IM injections eg. konakion
- f. Breast feeding is not contra indicated provided the neonate receives HBV vaccination and immunoglobulin at birth.
- g. A postnatal management plan should be implemented and consider referral to a Hepatology Clinic when tests indicate abnormal liver function.

References

NHMRC The Australian Immunisation Handbook, 9th Edition, 2007.

<http://www9.health.gov.au/immhandbook/>

Australasian Society for Infectious Diseases 'Management of Perinatal Infections' 2003.

<http://www.racp.edu.au/asid/resources.htm>

New Zealand Immunization Schedule

<http://www.moh.govt.nz/moh.nsf/indexmh/immunisation-schedule>

Links to other related College Statements

[C-Gen 2 Guidelines for consent and the provision of information regarding proposed treatment](#)

Disclaimer

This College Statement is intended to provide general advice to Practitioners. The statement should never be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of each patient.

The statement has been prepared having regard to general circumstances. It is the responsibility of each Practitioner to have regard to the particular circumstances of each case, and the application of this statement in each case. In particular, clinical management must always be responsive to the needs of the individual patient and the particular circumstances of each case.

This College statement has been prepared having regard to the information available at the time of its preparation, and each Practitioner must have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that College statements are accurate and current at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become available after the date of the statements.