



Improving hepatitis C antenatal screening practise

The *National Hepatitis C Testing Policy* recommends antenatal screening for hepatitis C is practised selectively on the basis of identified risk factors for hepatitis C. The testing of pregnant women on the basis of risk factors takes advantage of the potential for health interventions in antenatal clinical encounters, whilst screening only those who are identified as having risk factors for hepatitis C.

The *National Hepatitis C Testing Policy* concludes that universal antenatal screening for hepatitis C is “not a clinically justifiable approach.” The number of women diagnosed as a result of universal screening may not be higher than the number diagnosed by risk-factor testing, there is a low risk of mother-to-child transmission and limited available interventions known to minimise the risk of transmission.

There are inconsistencies in recommendations on hepatitis C antenatal screening practice at a national level. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) recommend that all pregnant women be offered hepatitis C antibody screening. Policy inconsistencies at the national level are reflected in inconsistencies between the policies of State and Territory governments and of hospital and private practices.

The *National Hepatitis C Testing Policy* identifies core principles that govern hepatitis C testing practice in Australia. These principles acknowledge and protect the rights and interests of the patient. There is evidence of significant levels of non-compliance with these principles of testing in the antenatal setting. Policy inconsistency may facilitate poor testing practice.

To protect the rights and interests of patients, antenatal practitioners should comply with the *National Hepatitis C Testing Policy's* recommendations regarding antenatal screening and principles for testing for hepatitis C. To enhance compliance with the *National Hepatitis C Testing Policy's* recommendations in the antenatal setting it is necessary to achieve consistency in the recommendations regarding antenatal screening for hepatitis C made by national bodies and organisations. This is an important first step in achieving consistency in practice and enhancing compliance with principles for testing across the country.

Hepatitis Australia calls for all relevant national organisations, including the RANZCOG, State and Territory governments and the Australian College of Midwives to:

- Implement educational interventions that increase practitioners understanding of hepatitis C and hepatitis C testing principles, and their capacity to undertake hepatitis C risk assessments, pre-test discussions and post test counseling.
- Actively promote adherence to the principles for testing outlined in the *National Hepatitis C Testing Policy*, which are designed to ensure the rights and interests of patients are upheld.
- Actively promote compliance with the screening practices recommended by the *National Hepatitis C Testing Policy*.

Background

Risk of mother to child transmission

The risk of mother to child transmission of hepatitis C during pregnancy or at birth (vertical transmission) is estimated to be 6% for mothers with chronic hepatitis C. There are indications that there is an increased risk of vertical transmission for mothers who have a high viral load or who have co-infection with HIV.

In 1999, the most recent year for which published estimates are available, it was estimated that 3,117 women with hepatitis C received antenatal care. This equates to 1.3% of women who received antenatal care that year.

Generally, observation studies have not provided evidence that mode of delivery affects incidence of vertical transmission. Whilst some studies have indicated that the incidence of vertical transmission may be reduced by delivery via caesarean section before the rupture of membranes, consensus statements have concluded that caesarean section does not reduce the risk for vertical transmission. There are no recommended changes to obstetric practice during antenatal care or delivery or in management of the neonate to limit the risk of transmission made by RANZCOG or the National Health and Medical Research Council. Some institutions do however employ practices intended to limit vertical transmission during birth, such as avoidance of fetal scalp electrodes.

Rationale & Recommendations of the National Hepatitis C Testing Policy

The *National Hepatitis C Testing Policy* developed by an advisory committee of the Commonwealth Government recommends antenatal screening for HCV on the basis of risk factors for hepatitis C and specifically concludes that there is no clinical justification for universally offering antenatal screening for HCV: "Routine screening of pregnant women is not a cost effective or clinically justifiable approach."

The rationale for the policy of selective rather than universal screening was clearly outlined within an earlier published edition of the *National Hepatitis C Testing Policy* and the evidence supporting this rationale remains unchanged. As noted above the prevalence of hepatitis C among pregnant women is low, so there would be a low expected number of positive cases resulting from universal screening. A high number of indeterminate and false positive results may be expected to be diagnosed in a low-prevalence population, causing unnecessary anxiety. There is no evidence that prevalence of hepatitis C is higher amongst pregnant women, that being pregnant is a risk factor for hepatitis C or that pregnant women have different risk factors than the general population. The additional number of pregnant women who would be diagnosed as a result of universal screening may not be significantly higher than the number diagnosed by risk-factor testing. The risk of mother to child transmission is low and, as discussed previously, interventions to minimise the risk of transmission are very limited. Further, knowledge of hepatitis C status is believed to be unlikely to affect a woman's decision about her current pregnancy. The policy of screening on the basis of risk factors capitalises on the opportunity presented by the antenatal work-up to assess hepatitis C status whilst testing only those considered to be at risk for HCV. This policy is likely to avoid unnecessary expenditure associated with testing in cases of negligible risk.

Inconsistent recommendations on hepatitis C antenatal screening

There are inconsistencies in recommendations on hepatitis C antenatal screening at a national level. In contrast to the recommendations of the *National Hepatitis C Testing Policy*, RANZCOG recommends that "all pregnant women should be offered hepatitis C screening and those at high risk should be actively encouraged to undergo screening." Whilst RANZCOG does not outline a rationale for this policy, universal antenatal screening provides an opportunity to identify women unaware of their hepatitis C status - and who may be asymptomatic - and to link them to appropriate health services and facilitate their long term health care. Further, this may also allow for diagnosis of infants of affected mothers and facilitate their long term health care. As stated above, however, it is unlikely that diagnosis as a result of universal screening will be significantly higher than for selective testing.

Policy inconsistencies at the national level are reflected in differences between the policies of State and Territory governments and, at the more local level, of hospital and practice-specific policies. In a survey of 225 hospitals, conducted by Hunt and Lumley (2002), approximately half had a recommendation about antenatal screening for hepatitis C. Approximately 60% of these recommended testing on the basis of risk factors and 40% recommended universal hepatitis C testing for antenatal women. Similarly, in a survey of the policy and practice of 847 general practitioners (GPs), private obstetricians and hospitals, undertaken by Spencer et al. (2003), 54% of private obstetricians, 46% of GPs and 23% of public hospitals reported universally offering HCV testing. Similarly, in

a survey of 523 obstetricians approximately 60% reported always routinely screening for HCV and a further 30% reported usually or sometimes routinely screening. Approximately 20% of those surveyed reported always routinely screening for risk factors for exposure to hepatitis C and a further 47% usually or sometimes 'routinely ask about risk factors for exposure to HCV.' These studies are evidence of the disparities in policy and practice and wide spread non-compliance with the recommendations of the *National Hepatitis C Testing Policy*.

Evidence of widespread non-compliance with national Hepatitis C testing principles

The *National Hepatitis C Testing Policy* identifies seven core principles that govern hepatitis C testing practice in Australia, including that testing is:

- confidential and voluntary with informed consent and pre and post discussion
- of benefit to the person being tested.

These principles recognise the significance of the diagnostic experience to how a patient understands hepatitis C, experiences the wait for results, employs strategies to reduce further risk of hepatitis C transmission and perceives themselves as a person living with the virus.

A number of studies have highlighted significant levels of non-compliance with these principles of testing in the antenatal setting. In a survey of 847 private obstetricians, general practitioners and public hospitals undertaken by Spencer et al. only 62% of private obstetricians, 70% of GPs and 61% of public hospitals reported obtaining specific consent for HCV antibody testing in the antenatal setting. Further, 22% of private obstetricians, 8% of GPs and 12% of hospitals reported no pre-test counselling. A more recent study undertaken by Polis (2005), similarly indicates a failure to obtain specific consent for testing from antenatal women. 95% of the pregnant women involved in the study were tested for HCV antibodies according to their medical files. Of those antenatal women who reported on their decision to accept or decline testing (468/479), 21.3% reported they had said 'no' to screening and 8.5% did not know if they had been tested. This suggests that testing occurred without specific consent and contrary to the expressed desire of the patient. Further, of 400 women who commented on the provision and quality of hepatitis C information provided in the antenatal encounter, 67% said they had not received any information on hepatitis C, suggesting that pre-test discussions were not conducted and the consent given was not informed. Women who said they had received pre-test information rated the quality of information poorly.

Anecdotal evidence similarly indicates a lack of pre- and post-test counselling for women tested for HCV antibodies in the antenatal setting and failure to obtain specific consent prior to testing. Anecdotal reports further testify to failures to respect confidentiality and to offer pregnant women who test positive for HCV antibodies follow-up testing to assess their current HCV status. This can lead individual's who test positive for antibodies to assume they have the hepatitis C virus, when the natural history for HCV indicates that 25% of those who are exposed to the virus will spontaneously clear the virus. Further anecdotal evidence indicates that pregnant women who are identified as having chronic hepatitis C are not always provided with accurate information regarding HCV testing of their child after birth. The benefit to women and their children of antenatal screening is limited and the potential for harm heightened if the principles for hepatitis C testing are not adhered to.

Impact of inconsistent policy

Failure to adhere to the testing principles outlined in the *National Hepatitis C Testing Policy* is never justifiable. However, policy inconsistency may facilitate poor testing practice. Policy inconsistencies constrain advocacy efforts to uphold testing principles and limit opportunities for appropriate educational interventions to promote compliance with testing principles. Further, there may be an association between universal screening and failure to uphold testing principles. Recommending that antenatal women should universally be offered hepatitis C testing may add pressure to clinicians to discuss more issues with patients in an already busy session (RANZCOG recommends a minimum of 8 tests be undertaken at the first antenatal visit.) This pressurised encounter may be associated with failure to obtain informed consent and provide appropriate counseling.

A busy antenatal visit may also not be the most conducive environment to a thorough and sensitive assessment of hepatitis C risk factors. This does not, however, justify failure to adhere to national testing principles or to test when there is no benefit to the women. Rather it can be seen as a need to increase practitioners' capacity to sensitively conduct an assessment of hepatitis C risk factors during a pressurised antenatal encounter. This need may be met by appropriate protocols for risk factor assessment and pre-test counselling for pregnant women supported by suitable educational interventions.

There is a further need to assess educational requirements of antenatal health care workers. Studies indicate misinformation about breastfeeding and transmission and inappropriate inclusion of a HCV+ sexual partner as a risk factor amongst antenatal clinicians. This raises concerns about antenatal clinicians' ability to conduct risk assessments and provide appropriate pre-test discussions and post-test counselling. Educational interventions that increase practitioners understanding of hepatitis C and hepatitis C testing principles, as well as their capacity to undertake hepatitis C risk assessments appropriate to the setting, pre-test discussion and post test counseling may enhance compliance with national testing policy.

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