

Prevalence and management of hepatitis B infection in pregnancy at Northern Health: a clinical audit



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BACKGROUND

- Chronic Hepatitis B (CHB) is a chronic, incurable liver disease with mother to child transmission (MTCT) being the leading cause of acquisition.
- Universal screening to reduce MTCT is a core component of antenatal care.
- The antenatal period provides an opportunity to engage patients with CHB in the healthcare system and emphasise the importance of antenatal and long-term management of the disease.
- The 2019 Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) hepatitis B management guideline¹ details antenatal, intrapartum and postpartum recommendations as well as strategies for long-term follow up and prevention in close contacts.

AIM

Our aim was to investigate the antenatal prevalence of CHB at Northern Health and evaluate our management against current guidelines.¹

METHODS

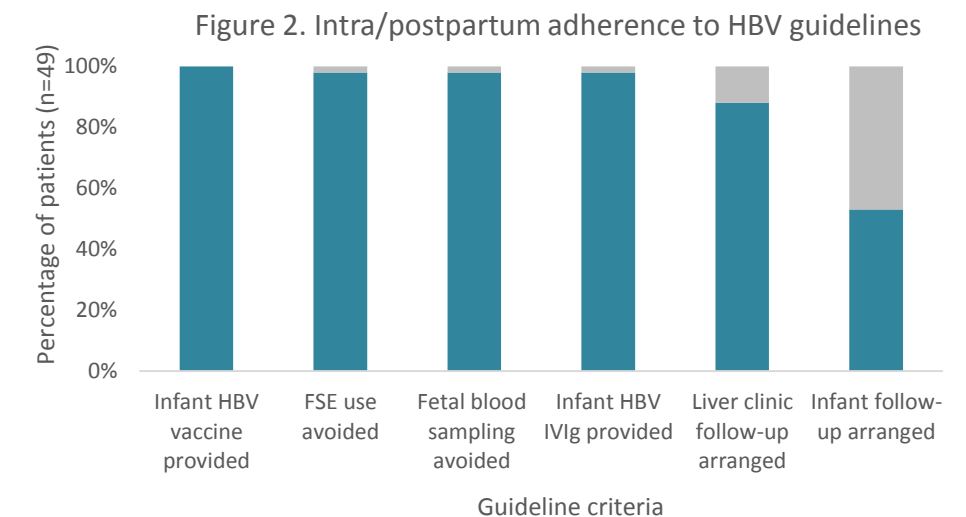
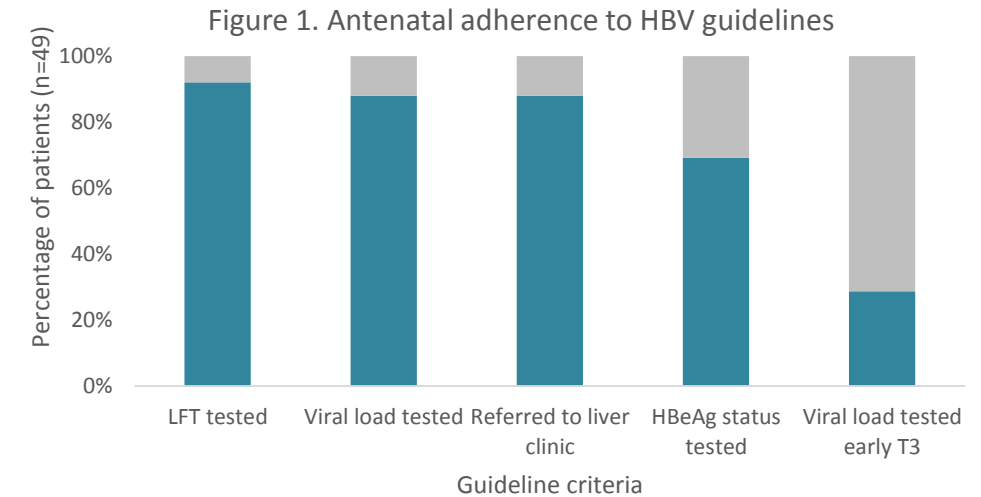
- A retrospective audit of all women birthing ≥ 20 weeks gestation from Jan 2016 to Dec 2017.
- Routinely-collected maternity data was extracted from the Birthing Outcome System
- Total births and rates of HBsAg testing were recorded
- Detailed outcomes on all women with positive HBsAg status were obtained by medical record review
- Descriptive analysis of demographics, antenatal, intrapartum, post partum and long-term management was performed
- An adherence rate of $> 90\%$ to RANZCOG guidelines was considered acceptable

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RESULTS

- 7269 women birthed during the study period
- 7215 (99.3%) had their HBsAg status recorded
- The prevalence of CHB was **0.7%**, which was significantly lower than the 1.4% observed in 2006-11 ($P < 0.001$).²
- Of the 49 women with CHB:
 - 86% were born overseas
 - Antenatal screening was the first diagnosis of CHB in 8
 - Half had no regular liver surveillance prior to pregnancy
 - 7 (15%) met criteria for antiviral therapy during pregnancy and six were treated with tenofovir
 - Only 26 babies (53%) had follow-up plan documented prior to discharge
- Adherence of >90% was achieved for under half of criteria measured - timing of viral load testing, HBeAg testing and arranging infant follow up are criteria that can be improved.



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CONCLUSIONS

- Prevalence of CHB in our antenatal population has halved in the past decade.
- Areas with potential for improvement have been defined in this study which will allow targeted resource allocation.
- Early referral to the newly formed specialist obstetric medicine service will ensure continuity of care, education concerning CHB, appropriately timed investigations and AVT if necessary, and appropriate post-partum follow up.
- Provision of CHB patient education in different languages is appropriate given the ethnically diverse CHB-affected population (E.g. The Hepatitis B Story³)
- Pregnancy remains an important opportunity to detect CHB and provide education and follow up to optimise long term health outcomes.

REFERENCES

- ¹Royal Australian and New Zealand College of Obstetricians and Gynaecologists College Statement Hepatitis B (C-Obs 50). Melbourne: Royal Australian and New Zealand College of Obstetricians and Gynaecologists, 2019.
- ²Giles ML, Grace R, Tai A, et al. Prevention of mother-to-child transmission of hepatitis B virus (HBV) during pregnancy and the puerperium: current standards of care. Aust N Z J Obstet Gynaecol 2013; 53: 231–235.
- ³Bennett G et. al. The Hepatitis B Story, St. Vincent's Hospital, Melbourne, 2015 www.svha.org.au/gp/clinics/Pages/gastroenterology