



Effective Health Care

Management of Hepatitis B in Pregnancy

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The focus on the management of chronic hepatitis B in pregnant women, which is part of the broader topic of *Management of Hepatitis B in Pregnancy*, was found to be addressed by evidence-based guidelines, including a guideline from the National Institute for Health and Care Excellence (NICE), which is listed below, a recommendation statement from the United States Preventive Services Task Force (USPSTF), and several systematic reviews. Given that the existing publications cover this nomination, no further activity will be undertaken on this topic.
 - National Institute for Health and Clinical Excellence: Guidance. Hepatitis B (chronic): Diagnosis and management of chronic Hepatitis B in children, young people and adults. London: National Institute for Health and Care Excellence (UK) Copyright (c) National Clinical Guideline Centre, 2013; 2013.
- The focus on the management of acute hepatitis B in pregnant women, which was also part of this nomination, is not feasible for a full systematic review due to the limited data available for a review at this time. This topic could potentially be considered for new research in comparative effectiveness.

Topic Description

Nominator(s): Health care professional association

Nomination Summary: The nominating organization is interested in the management of acute and chronic hepatitis B in pregnant women and preventing vertical transmission. The nominating organization is also interested in the safety of invasive prenatal diagnostic procedures for patients with chronic hepatitis. In addition, they are interested in the benefits and harms of breastfeeding for infants of women with hepatitis B.

Staff-Generated PICO

Management of Chronic Hepatitis B during pregnancy

Population(s): Pregnant women with chronic hepatitis B

Intervention(s)/Exposure(s): Testing, antiviral therapy, prenatal diagnostic procedures, intrapartum care

Comparator(s): Usual care or other intervention

Outcome(s): Vertical transmission, liver failure, mortality, morbidity, chronic liver disease, quality of life

Management of Acute Hepatitis B during pregnancy

Population(s): Pregnant women with acute hepatitis B

Intervention(s)/Exposure(s): Testing, antiviral therapy, prenatal diagnostic procedures, intrapartum care

Comparator(s): Usual care or other intervention

Outcome(s): Vertical transmission, liver failure, mortality, morbidity, chronic liver disease, quality of life

Management of Vertical Transmission

Population(s): Infants of women with hepatitis B

Intervention(s)/Exposure(s): Vaccination and immunoprophylaxis, breastfeeding

Comparator(s): Usual care or other intervention

Outcome(s): Vertical transmission, benefits of breastfeeding, harms of breastfeeding, liver failure, mortality, morbidity, chronic liver disease, quality of life

Key Questions from Nominator:

1. How is acute hepatitis B managed in pregnant women?
 - a. Specific tests
 - b. Interpretation of tests
2. How are pregnant patients whom are presumed chronic hepatitis B carriers treated?
3. How can the risk of vertical transmission of hepatitis B virus be reduced?
 - a. Maternal screening
 - b. Neonate immunoprophylaxis
4. Are there special considerations for intrapartum care in the context of maternal hepatitis infection?
5. What is the safety of invasive prenatal diagnostic procedures for patients with chronic hepatitis?
6. Is breastfeeding contraindicated for infants of women with hepatitis?
7. What is the role of immunotherapy in the treatment of chronic hepatitis B in pregnancy?

Revised Key Questions:

In consultation with our clinical reviewer, we consolidated the key questions from the nominating organization. The revised key questions are:

1. What is the effectiveness of different management approaches for acute hepatitis B in pregnant women?
 - a. Role of testing
 - b. Interpretation of tests and resulting management
2. What is the safety and effectiveness of different management approaches for chronic hepatitis B in pregnant women?
 - a. Role of immunotherapy
 - b. Invasive prenatal diagnostic procedures
 - c. Intrapartum care
3. What is the effectiveness of the following strategies for prevention of hepatitis B in infants?
 - a. Maternal screening
 - b. Intrapartum care
 - c. Neonate immunoprophylaxis
4. What are the benefits and harms of breastfeeding for infants of women with hepatitis B?

Considerations

- Hepatitis B is most commonly spread through vertical (i.e., mother-to-child) transmission at birth. This topic is important because of the long-term risks hepatitis B poses to otherwise healthy women and their infants. Hepatitis B during pregnancy presents with unique management issues for both the mother and fetus. A review on evidence-based interventions to manage diagnosed patients as well as to prevent the vertical transmission of the disease would help clinicians and patients make better-informed decisions.
- The portion of the topic regarding management of *chronic* hepatitis B in pregnant women was found to be addressed by a guideline from NICE titled *Hepatitis B (chronic): Diagnosis and management of chronic hepatitis B in children, young people and adults*, among other guidelines and systematic reviews. The systematic review used to inform this guideline included literature published through October 10, 2012. The guideline did not address acute hepatitis B infection.
- The portion of the topic regarding management of *acute* hepatitis B in pregnant women is not feasible for systematic review at this time due to the limited number of studies identified in this area. A scan of the literature did not identify any guidelines, systematic reviews, or studies relevant to management of pregnant women with acute hepatitis B.