6 Risk Factors for Mother to Child Transmission of Hepatitis C (HCV): A Prospective Observational Study

Monia Prasad
for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network, Bethesda, MD

OBJECTIVE: To identify risk factors for mother to child transmission (MTCT) of HCV.

STUDY DESIGN: A multicenter prospective observational study in pregnant people with a singleton gestation and HCV screening antibody signal to cut-off ratio ≥ 5 measured < 24 weeks gestation. The primary outcome was MTCT defined by any one of the following criteria: infant HCV RNA positive at the 2-month visit, RNA or antibody positive at 18 months (a repeat test was used for confirmation if the RNA and antibody tests were discordant), or a clinical result that is either RNA or antibody positive obtained at least 18 months of age with a confirmed clinical diagnosis of HCV. Risk factors associated with MTCT were determined using backward elimination; variables significant at \( p < 0.05 \) were retained. Adjusted odds ratios (aOR) and 95% confidence intervals (CI) were estimated using multivariable logistic regression.

RESULTS: 109,379 pregnancies were screened for HCV; 1,224 were antibody positive and 772 were enrolled. 430 (56%) had follow-up data available to assess MTCT. The main reasons for lost to follow-up were lost contact (24%), refused specimen collection (5%), and infant placed in foster care or adopted (4%). Among those with follow-up data, 26 (6%, 95% CI 4% - 9%) infants were confirmed with MTCT. Risk factors for MTCT included maternal HCV RNA > 10^6 IU/mL and antepartum bleeding (aOR, 95% CI: 3.23, 1.31-7.97). There was no difference in odds of MTCT among those with and without planned prelabor cesarean (aOR 0.80, 95% CI: 0.31-2.07) (Table 1).

Those with undetectable viral loads did not transmit HCV to their children.

CONCLUSION: This study confirms the MTCT rate of HCV to be around 6%. Level of viremia and antepartum bleeding were the most significant risk factors for MTCT. MTCT did not occur in those with undetectable viral loads, and planned prelabor cesarean did not impact MTCT in this cohort. These findings may influence the selection of patients who may benefit from an interventional trial.

7 The Impact of Risk Factors on Aspirin's Efficacy for the Prevention of Preterm Birth

Emily Nuss¹, Matthew Hoffman¹, Janet Moore⁵, Tracy Nolen³, Elizabeth McClure⁵, Shivaprasad S. Goudar⁴, Richard Derman⁵
¹Christiana Care Health System, Wilmington, DE, ²Department of Obstetrics and Gynecology, Christiana Care Health System, Newark, DE, ³RTI International, Research Triangle Park, NC, ⁴Jawaharlal Nehru Medical College, Belagavi, Karnataka, ⁵Jefferson Health, Philadelphia, PA

OBJECTIVE: In 2014, the USPTF recommended that women with two moderate risk factors for preeclampsia be considered for low dose aspirin (LDA) therapy to prevent preclampsia but stated that “the evidence was less certain for this approach”. In 2020, the ASPRIN trial showed that...