Chronic HCV in pregnancy: Linkage to care and postpartum treatment

John Cafardi, MD
The Christ Hospital
Assistant Professor of Medicine (adj)
University of Cincinnati
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Postpartum linkage to care of both HCV infected mothers and testing of at-risk infants has historically been poor.

Philadelphia January 2011 – February 2015: 537 children born to 500 HCV+ women; 84 (16%) had HCV testing performed with 4 (1%) HCV infected children identified. Based on estimated VT rates, an additional 23 infected children were present but not identified\(^1\).
Background

• Boston January 2014 –March 2018: baseline linkage to care was 24/164 (17%); with linkage intervention this was increased to 16/66 (24%) while linkage intervention plus co-localization of care increased this to 13/25 (52%)²

• Integration of prenatal and HCV care was reported to increase linkage to care with 15 of 24 pregnant women identified in one academic center, although only 3 of 24 (12%) obtained treatment, two through a clinical trial of antepartum treatment and one via postpartum treatment³

¹Clin Inf Dis 62(8) 15 April 2016: 980-985
²Hepatol Commun 5(9). Sept 2021: 1543-1554
³IDSOG meeting abstract #21, Am J Obs Gynecol 2023 Feb (suppl): S778
Current Study

• Investigator initiated study funded by Gilead Sciences

• June 2018 through June 2022

• Pregnant women identified at or before 36 weeks gestation and followed through 12 months post-partum
Current Study

• Maternal treatment with SOF/VEL (Epclusa) initiated 6 months post-partum, with assessment of SVR12 12 months post-delivery

• Maternal viral samples to be obtained at 36 weeks; infant samples at 12, 24 and 48 weeks of age

• Vertical transmission pairs to undergo phylogenetic analysis
Results

• 54 subjects enrolled; planned enrollment of 150 but this cut back due to COVID19 pandemic

• evaluable data was obtained on 39 mothers and 23 infants. Data on the remaining 15 subjects is in process of being collected (rural sites in other states)

• one confirmed vertical transmission
Results

- Twelve (12) achieved documented SVR12

- Four (4) reported completing DAA therapy; returned to clinic for new medications and to return used bottles but did not return for SVR12 visit
Results, continued

• One (1) withdrew after enrollment stating she did not want to stop breastfeeding and begin DAA therapy, a condition of study participation

• Thirteen (13) were lost to follow-up and did not complete therapy through the study. Of these 13, two (2) have re-integrated into care at our institution following the closure of the study and are in the process of receiving DAA therapy.
Results, continued

• One (1) additional patient documented completing treatment at another institution. These individuals reported difficulties with care coordination that they attributed to COVID19
Comparison to historical trends

• 31% linked to care and cured
  • This can be extrapolated to 49% if those who successfully linked and completed treatment are included

• 59% of infants tested with 4% VT rate (1/23)

• Phylogenetic analysis of transmitted virus sample is ongoing

• Determination of remaining subject outcomes in progress
Conclusions

• Linkage to care was consistent with observed historical trends involving linkage interventions and co-localization initiatives (50-60%)

• Rates of successful treatment were markedly higher than in prior reports although the provision of medication as a part of the study makes extrapolation of this finding difficult given current trends with third-party payers