Session: 189. Hepatitis B and C Across the Lifespan
Friday, October 6, 2017: 8:30 AM

Background. Enormous advances in treating/curing patients suffering from Hepatitis C (HepC) infection have occurred; resulting in many states mandating screening for HepC for older individuals. Unfortunately, no protection of screening exists for newborns. In Kentucky, rates of HepC among pregnant women are the second highest within the U.S., which has been associated to high intravenous drug use. Infants born to those women are at risk of HepC infection and other conditions such as neonatal abstinence syndrome (NAS). The current study examined the rate of HepC screening in a high-risk cohort (newborns suffering from NAS) and it's impact on policy-making for this vulnerable population.

Methods. Kentucky Medicaid records, from 2015, were obtained to develop a detailed demographic, behavioral, clinical, and diagnostic data set (n = 152,749). NAS was defined by ICD-9 code 779.5 and ICD-10 code P96.1. HepC screening was defined by CPT codes (CPT 87520 [HCV, direct probe], 87521 [HCV, amplified probe], and 87522 [HCV RNA, Quantitative] or antibody [CPTs 86803–4]). Initially a descriptive study was performed, then multiple logistic regression techniques were used to test what variables impacted the odds of not being screened for HepC.

Results. A total of 1234 newborns with NAS were identified. The majority showed signs of NAS within 24 hours (64%), were white (68%) and were admitted to the hospital for an average of 24.8 days. Only one-in-three newborns with NAS (n = 412, 33.4%) were screened for HepC. Non-Whites (OR = 1.58, 95% CI 1.45–1.71, $P < 0.001$) and those living in non-urban areas (OR = 1.42, 95% CI 1.28–1.56, $P < 0.001$) were the only study variables to significantly impact the odds of not being screened for HepC (for newborns suffering from NAS).

Conclusion. A high-risk and vulnerable population for HepC may not be getting screened for HepC and thus are being underserved by the health care system. Non-Whites and those in rural areas are the most affected. Solutions and policies need to be focused on this population and area where screening is lacking. Optimization of maternal screening for HepC is crucial in high-risk populations.

Disclosures. **All authors:** No reported disclosures.

1692. The Incidence of Hepatocellular Carcinoma Is not Increased in Individuals with Chronic Hepatitis C After Treatment with Interferon-free Regimens: an ERCHIVES Study

Darrick K. Li, MD, PhD[1]; Yanjie Ren, MS[2]; Obaid Saikh, MD[2]; Daniel S. Fierer, MD, FIDSA[3]; Vincent Lo Re III, MD, MSCE[4]; Abdul-Badi Abou-Samra, MD, PhD[5]; Raymond T. Chung, MD[6]; Adeel Butt, MD, MS[5]; [1]Department of Medicine, Massachusetts General Hospital, Boston, Massachusetts; [2]VA Pittsburgh Healthcare System, Pittsburgh, Pennsylvania; [3]Department of Medicine, Division of Infectious Disease, Icahn School of Medicine at Mount Sinai, New York, New York; [4]Center for Pharmacoepidemiology Research and Training, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania; [5]Hamad Medical Corporation, Doha, Qatar; [6]Gastrointestinal Division, Massachusetts General Hospital, Boston, Massachusetts

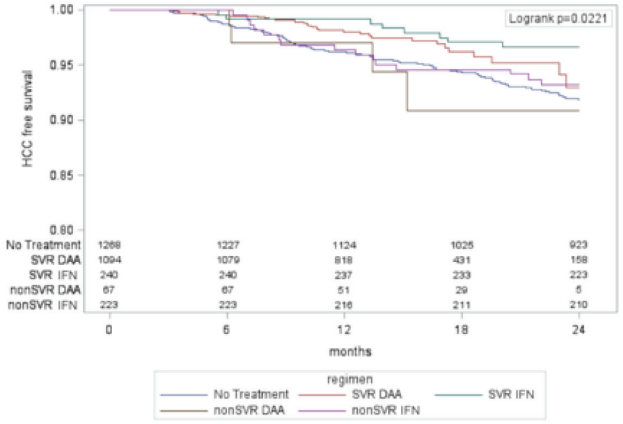
Session: 189. Hepatitis B and C Across the Lifespan
Friday, October 6, 2017: 8:30 AM

Background. Sustained virologic response (SVR) after interferon-based treatment for chronic hepatitis C virus (HCV) infection has been strongly linked with decreased incidence of hepatocellular carcinoma (HCC). Surprisingly, several recent studies have reported higher rates of HCC in individuals treated with direct-acting antivirals (DAAs). However, making definitive conclusions has been challenging due to the heterogeneous populations and methodologies of these reports. As such, we sought to investigate whether DAA use is associated with increased rates of incident HCC.

Methods. Using the Electronically Retrieved Cohort of HCV Infected Veterans (ERCHIVES) database, we identified 17,836 patients without a prior diagnosis of HCC and divided them into 3 groups based on treatment: (a) pegylated interferon and ribavirin (IFN) (n = 3,534); (b) DAA-based therapy (n = 5,734); and (c) an untreated control group (n = 8,468). Predictors of HCC were identified using multivariate Cox proportional hazards analysis. HCC-free survival in cirrhotics was assessed by Kaplan–Meier analysis.

Results. SVR was achieved by 66.6% and 96.2% of the IFN and DAA groups, respectively. In our cohort, the incidence rate of HCC was not different between IFN and DAA groups (7.48/1000 vs. 7.92/1000 patient-years of follow-up; P = 0.72). Moreover, DAA treatment was not associated with an increased risk of HCC (HR 1.16; [95% CI: 0.79, 1.71]) compared to IFN treatment. Other risk factors for HCC included older age, alcohol abuse/dependance history, smoking history, HCV genotype 3 infection, proton-pump inhibitor use, AFP > 20, and cirrhosis. Notably, among cirrhotics who achieve SVR, HCC-free survival was not different between IFN and DAA treated groups, and both groups had significantly improved HCC-free survival compared with untreated patients.

Conclusion. Among cirrhotic patients with HCV, DAA treatment is associated with a comparable risk of HCC to IFN treatment. Furthermore, the rate of HCC after SVR by any treatment was significantly lower than for those untreated or who failed to achieve SVR. Previously reported increases in HCC associated with DAA treatment appear to be explained by the presence of pre-existing risk factors for HCC.



Disclosures. **R. T. Chung**, Gilead: Investigator, Research grant; Abbvie: Investigator, Research grant; Merck: Investigator, Research grant; Janssen: Investigator, Research grant; **A. Butt**, Merck: Investigator, Grant recipient

1693. Antiviral Treatment among Hepatitis B Virus-Infected Pregnant Women—New York City and Michigan, 2013–2015

Ruth Link-Gelles, PhD, MPH[1]; Alaya Koneru, MPH[2]; Julie Lazaroff, MPH[3]; Patrick Fineis, BA[4]; Noele Nelson, MD, PhD, MPH[1]; Sarah Schillie, MD, MBA, MPH[5]; [1]Division of Viral Hepatitis, Centers for Disease Control and Prevention, Atlanta, Georgia; [2]Centers for Diseas Control and Prevention, Atlanta, Georgia; [3]Perinatal Hepatitis B Prevention Unit, New York City Department of Health and Mental Hygiene, New York, New York; [4]Division of Immunization, Michigan Department of Health & Human Services, Lansing, Michigan; [5]Centers for Disease Control and Prevention, Atlanta, Georgia

Session: 189. Hepatitis B and C Across the Lifespan
Friday, October 6, 2017: 8:30 AM

Background. Individuals with chronic hepatitis B virus (HBV) infection are at increased risk for cirrhosis and hepatocellular carcinoma. Chronic HBV infection develops in 90% of persons infected at birth. Although postexposure prophylaxis (PEP), consisting of hepatitis B vaccine and immune globulin at birth, and completion of the three-dose vaccine series prevents up to 95% of perinatal HBV infections; however, breakthrough infections can occur, especially among infants born to women with high viral loads (VLs). Maternal antiviral treatment during pregnancy can reduce perinatal HBV transmission by 70% above the effect of infant PEP alone. We assessed factors associated with maternal antiviral treatment in a cohort of HBV-infected pregnant women with high VL.

Methods. During 2013–2015, the CDC-funded Supplemental Perinatal Hepatitis B Prevention Program collected information from interviews and medical charts of HBV-infected pregnant women in two sites. We assessed the association of demographic and clinical factors with maternal treatment in women with high VL (>200,000 IU/mL), considering statistical significance at $P < 0.05$.

Results. Among 1,521 women with maternal treatment and VL data, 151 (10%) had high VL. Among these 151 women, 66 (44%) received antiviral treatment (Table), all of whom were of Asian/Pacific Island race. None of the seven women of other races were treated (P = 0.02). Fifty-nine women (48%) receiving Medicaid were treated compared with six women (24%) who had private insurance (P = 0.04).

Conclusion. Mother's race, country of birth, and insurance status were significantly associated with treatment in women with high VL. Because most women with high VL did not receive antiviral treatment during pregnancy, opportunities to reduce perinatal HBV transmission exist.

Table. Association between characteristics of pregnant women with high viral load and HBV treatment status.

Characteristic	Treated (n = 66)	Not treated (n = 85)	P-value
Age in years, median (IQR)	29.5 (26.8, 33.1)	31.0 (27.7, 34.7)	0.09
Mother's race, n (%)			0.02
Asian/Pacific Islander	66 (46%)	78 (54%)	
Other	0	7 (100%)	
Country of birth			0.005
China	61 (49%)	63 (51%)	
Other	5 (19%)	22 (81%)	
Mother's insurance			0.04
Medicaid	59 (48%)	65 (52%)	
Private	6 (24%)	19 (76%)	
Other	1 (50%)	1 (50%)	

Disclosures. **All authors:** No reported disclosures.