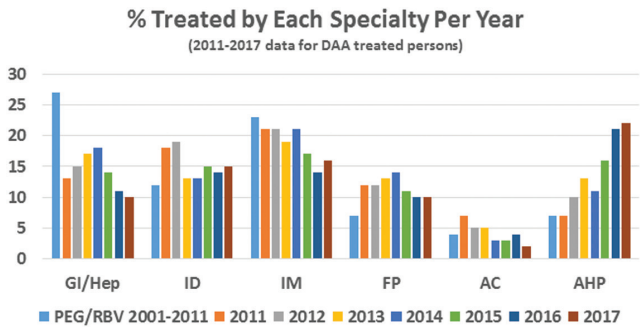
Figure 2. Proportion of patients treated by each specialty by year of treatment initiation (excludes those classified as "other" and "missing").



Disclosures. **A. Ajwad Butt**, Gilead: Grant Investigator, Research grant.

2220. Wirelessly Observed Therapy with a Digital Medicines Program to Optimize Adherence and Target Interventions for Oral Hepatitis C Treatment

Maurizio Bonacini, MD[1]; Yoona Kim, PharmD, PhD[2]; Caroline Pitney, PharmD[3]; Lee McKoin, BA[3]; Melody Tran, PharmD, MS[2] and Charles Landis, MD[3]; [1]Mission Gastroenterology and Hepatology, California Pacific Medical Center, San Francisco, California, [2]Proteus Digital Health, Redwood City, California, [3]Harborview Medical Center, University of Washington, Seattle, Washington

Session: 238. Hepatitis A, B, and C
Saturday, October 6, 2018: 12:30 PM

Background. Real-world data on adherence to new oral hepatitis C virus (HCV) therapies are limited. Suboptimal adherence can lead to unnecessary treatment failures. Usual methods to measure adherence are inaccurate, and do not allow for opportune intervention. The digital medicines program (DMP) consists of DigiMeds™ (medicines with an ingestible sensor), a wearable sensor patch that confirms ingestion, the Proteus Discover® mobile app, and secure web portal to allow for timely assessment of adherence, prevent missed doses, and maximize the likelihood of sustained virologic response (SVR), or cure. This study evaluated adherence and virologic outcomes in chronic HCV patients treated with sofosbuvir/ledipasvir (SOF/LDV) using the DMP.

Methods. This was a single-arm, prospective, open-label, pilot study at two sites. SOF/LDV tablets co-encapsulated with ingestible sensors allowed the DMP to record ingestion adherence rates (number of ingestions detected/number of expected ingestions). Other outcomes were medical interventions, SVR 12+ weeks after end of treatment, patient satisfaction, and safety.

Results. All 28 subjects (age 59 ± 7 years [mean ± SD], 61% male, 39% Caucasian, 93% treatment-naïve) had HCV genotype 1; 27 completed treatment. Most (82%) had <$25,000 income/year, 46% had psychiatric comorbidities, and 32% had a history of drug abuse. The DMP was used for 92% of expected days; mean ingestion adherence was 94%. Providers used the DMP data for same-day adherence interventions in 39% of patients. SVR was achieved in 26 of 28 subjects (2 had failed prior therapy). One subject who did not achieve SVR had high adherence (≥95%), suggesting viral resistance; the other was non-adherent (<90%). Most (92%) agreed the DMP helped them feel more involved in managing their healthcare and easy to use in their daily routine; 85% agreed the DMP helped them understand the importance of taking medications regularly. Four subjects reported four nonserious adverse events of rash/pruritus, which resolved and were consistent with use of adhesives.

Conclusion. These data suggest that the DMP may be used to support adherence to therapy through targeted, same-day adherence interventions, and optimize SVR rates, including in those with risk factors for nonadherence and in those who previously failed treatment.

Disclosures. **M. Bonacini**, Proteus Digital Health: Investigator, Research support. **Y. Kim**, Proteus Digital Health: Consultant and Employee, Consulting fee and Salary. **C. Pitney**, Proteus Digital Health: Research Contractor, Research support. **L. McKoin**, Proteus Digital Health: Research Contractor, Research support. **M. Tran**, Proteus Digital Health: Employee, Salary. **C. Landis**, Proteus Digital Health: Investigator, Research support.

2221. Active Substance Use Should Not Be a Contraindication for Hepatitis C Treatment in Hepatitis C and Human Immunodeficiency Virus Co-infected Patients

Nabil Zeineddine, MD[1]; Dagan Coppock, MD[1]; Zsofia Szep, MD[1]; Tiffany Scott, Research Assistant[1]; Taneesa Franks, Research assistant[1]; Anna Kesaris, Research Assistant[1]; Edgar Chou, MD[2] and Dong Heun Lee, MD[1]; [1]Division of Infectious Diseases and HIV Medicine, Drexel University College of Medicine, Philadelphia, Pennsylvania, [2]Department of Medicine, Drexel University College of Medicine, Philadelphia, Pennsylvania

Session: 238. Hepatitis A, B, and C
Saturday, October 6, 2018: 12:30 PM

Background. Hepatitis C virus (HCV) infection disproportionately affects HIV-infected patients. HIV/HCV Co-infected patients are more likely to develop advanced liver disease/cirrhosis in comparison to mono-infected patients. HCV treatment with new oral direct-acting antiviral (DAA) therapy is effective in HIV/HCV co-infected patients with cure rate similar to mono-infected patients. Despite the effective treatments, only small portion of co-infected patients are treated for HCV infection. One of the known barriers to HCV treatment is active substance abuse. However, there is limited information about outcomes of HCV treatment with active substance abuse in HIV/HCV co-infected patients. Our primary aim was to evaluate Hepatitis C treatment outcomes in HIV/HCV co-infected patients with active substance abuse (ASA).

Methods. We performed a retrospective cross-sectional study of HIV/HCV co-infected patients that were treated for HCV between 2014 and 2017 at Drexel University, Philadelphia, PA. We defined active substance abuse (ASA) by self-report of active drug use at the time of treatment evaluation. We described patient demographics and overall HCV sustained virologic response at 12 weeks after treatment.

Results. One hundred thirty-eight HIV/HCV co-infected patients were treated. The majority (N = 134, 97%) achieved sustained virologic response (SVR) after 12 weeks of treatment. Thirteen patients were active substance abusers, nine used cocaine, three used intravenous drug, and one used both. Twelve (92%) patients in the ASA group achieved SVR at 12 weeks in comparison to 122 (98%) in the non-ASA group (P = 0.26). ASA group had a higher rate of psychiatry comorbidities in comparison to the none-ASA group (100% vs. 58%, P = 0.002).

Conclusion. In our study, direct active antiviral HCV treatment was highly effective in HIV/HCV co-infected patients. Treatment outcomes were not different between active substance abuse group and none user group. Given co-infected patients have worsened prognosis with chronic HCV infection, active substance abuse should not be an absolute contraindication to HCV treatment.

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

2222. Impact of Sustained Virologic Response Achieved Through Newer Direct Acting Antivirals in Hepatitis C Infection on Diabetes Mellitus

Pradeep Kumar Mada, MD[1]; Matthew E. Malus, MD[2]; Bing Chen, MD[2]; Sharon Adley, Nurse Rotation Instructor[1]; Gabriel Castano, MD[3]; Maureen Moore, Co-ordinator[1]; Mohammed Alam, MD[1] and John King, MD[1]; [1]Infectious Diseases, Louisiana State University Health Sciences Center – Shreveport, Shreveport, Louisiana, [2]Internal Medicine, Louisiana State University Health Sciences Center - Shreveport, Shreveport, Louisiana, [3]Pediatrics, University of Texas Health Science Center at San Antonio, San Antonio, Texas

Session: 238. Hepatitis A, B, and C
Saturday, October 6, 2018: 12:30 PM

Background. Hepatitis C virus (HCV) infection is one of the leading causes of mortality and morbidity in the United States with an incidence of about 0.7 cases per 100,000 population and a prevalence of ~2.7 to 3.9 million people. To our knowledge only one study was performed so far to assess the relation between treating hepatitis C virus using direct acting antiviral drugs (DAA) and reduction in the severity of type 2 diabetes mellitus (DM). Our study aims to assess the effect of SVR in hepatitis C virus on type 2 DM. The effect of the management with newer agents leading to sustained virologic response (SVR) on type 2 DM was analyzed in hepatitis C virus infection.

Methods. We performed a retrospective chart review in our hepatitis clinic located in Shreveport, Louisiana. Patients with age greater than 18 years old, who has both uncontrolled hepatitis C and type 2 DM, seen in our clinic from November 1, 2014 to December 31, 2017 were included. Hospital electronic health records were screened for diagnosis of hepatitis C and uncontrolled type 2 DM by ICD codes. We performed paired sample t-test between pre- and 6-month post-treatment-values of fasting blood sugar and Body Mass Index (BMI).

Results. There was a statistically significant improvement in fasting blood sugar levels following hepatitis C therapy from 184.2 ± 74.8 to 133.06 ± 48.2 (P < 0.01), with an improvement of 51.2 ± 77.6 respectively (N = 49).There was a statistically significant improvement in HbA1c levels following hepatitis C therapy from 8.062 ± 1.8 to 7.019 ± 0.96 (P < 0.05), with an improvement of 1.042 ± 2.03 respectively (N = 21).There was no statistically significant improvement in BMI levels following hepatitis C therapy from 29.91 ± 6.6 to 29.79 ± 6.7 (P > 0.05), with slight improvement of 0.11 ± 2.08 respectively (N = 49).

Conclusion. We conclude that there was statistical significant reduction in fasting blood sugar and hemoglobin A1C levels after achieving sustained virological response with new direct antiviral treatment for hepatitis C. A pre- and posttreatment change in body mass index was statistically not significant implies that change in blood sugar level was not due to weight loss. There was no change in diabetic medication during the period of the study or there were no dose adjustments occurred.

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

2223. Effect of Direct-Acting Antivirals in Hemodialysis Patients with HCV: Real-Life Data

Nurten Nur Aydin, Assistant doctor[1]; Firdevs Aksoy, Assistant Professor[2]; Ilknur Yavuz, assistant proffessor[3]; Serap Iskender, MD[4]; Arzu Altunçekic Yildirim, assistant proffessor[5]; Ilknur Esen Yildiz, assistant proffessor[6] and Iftihar Koksal, Professor[1]; [1]Department of Infectious Diseases and Clinical Microbiology, Karadeniz Technical University, Medical Faculty, Trabzon, Turkey, [2]Department of Infectious Diseases and Clinical Microbiology, Karadeniz Technical University, Trabzon, Turkey, [3]Infectious Disease and Clinical Microbiology, giresun university faculty of medicine, Giresun, Turkey, [4]kanuni training and research hospital, Trabzon, Turkey, [5]ordu university faculty of medicine, ordu, Turkey, [6]Recep Tayyip Erdogan Univercity Faculty of Medicine, Rize, Turkey