Introduction

The newest epidemic of hepatitis C infections is occurring among younger people in rural areas in the United States. In Pennsylvania, the number of newly reported hepatitis C virus (HCV) infections among individuals ages 15 to 34 nearly doubled from 1,384 to 2,393 from 2003 to 2010. It is estimated 35-65% of individuals on opioid substitution therapy (OST) are infected with HCV. Currently available direct acting antivirals (DAAs) can safely be used with OST and offer SVR12 rates of 90 to 97%.

Methods

Setting

Infectious Disease clinic in rural Pennsylvania, in the city of DuBois

Patients referred from local methadone clinics, psychiatrists, primary care, and self-referral

Participants

We identified 51 patients with an HCV evaluation from 1/2015 - 9/2016

Data Collection

We reviewed medical records for patients who initiated HCV treatment

OST group was compared to 31 controls not using OST

Data Analysis

Statistical analysis using Fisher’s exact test was performed to determine differences in HCV cure (SVR12) between OST and non-OST groups

Objective

To compare the influence of OST therapy on SVR12 rates in HCV patients treated with DAAs.

Background

Over the past decade, a new cohort of infected 15-35 year olds has emerged and now represents the largest proportion of new cases in Pennsylvania. Pennsylvania has also seen an increase in opioid and other injection drug use similar to other states. This map demonstrates that injection drug use and young HCV cases reside in similar locations, with both urban and rural areas represented.

AASLD/IDSA Guidelines 2016

People who inject drugs (PWID) are identified in IDSA/AIDS Guidelines as a population who should receive treatment because of the elevated risk of HCV transmission as it may yield transmission reduction benefits. PWID should be screened for risk factors for HCV and one-time testing should be performed for all persons with behaviors, exposures and conditions associated with an increased risk of HCV infection. (Level B)

AASLD: American Association for the Study of Liver Diseases; IDSA: Infectious Diseases Society of America; PWID: people who inject drugs.

AASLD Gilead Clinical Guidelines as a Level B is conditions for which there is evidence and/or general agreement that a given diagnostic evaluation, procedure, or treatment is beneficial, useful, and effective from data derived from a single randomized controlled trial, non-randomized studies, or equivalent. Level C is weight of evidence and/or opinion in favor of usefulness and efficacy, from data derived from multiple nonrandomized clinical trials, meta-analyses, or equivalent.

Results

SVR12 by OST

EOT

No-EOT

Non-OST Group

OST Group

PP = Per Protocol and ITT = Intent to treat

Cost concerns have been identified as a key barriers for lack of treatment uptake by patients with a history of substance abuse. 24% of patients in the OST cohort were eligible for prescription drug assistance for DAAs therapy compared to only 6% of controls.

SVR12 was achieved in all patients on OST who completed follow-up.

Conclusions

In this retrospective analysis, DAAs for 8 to 12 weeks were highly efficacious regardless of OST and psychiatric comorbidities.

SVR12 was achieved in all patients on OST who completed follow-up.

DAAs were well tolerated in patients on OST.

Patients on OST and psychiatric comorbidities may benefit from a patient navigator to ensure follow-up.

Addressing drug addiction in rural America along with increasing HCV treatment uptake will be vital to the elimination of HCV.

Implications

Co-locating HCV treatment and substance abuse treatment services in the same clinical environment will significantly improve HCV treatment uptake and compliance.

A “mobile” approach would eliminate the transportation issues that plague rural Pennsylvania.

Patients on OST and psychiatric comorbidities may benefit from a patient navigator to ensure follow-up.

References


Discussion

This study showed that patients on OST who are effectively linked to care can be cured and achieved outcomes comparable to those not on OST.

About 1/3 of patients in the OST cohort were LTIF

Reasons for not achieving SVR

Lost to Follow-Up (LTFU) 6 0

Treatment D/C due to AE 0 0

Death 0 0

Adverse Events (AE)

Treatment D/C due to AE 0 0

Death 0 0

ITT analysis

DAA therapy was well tolerated in both groups

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Disclosures

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