

Case Report

Hepatitis C in Patients on Opioid Replacement Therapy

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OPEN ACCESS**Abstract**

Opioid addiction is an ongoing public health problem across the United States. The sharing of syringes and needles is a major risk factor for transmission of viral hepatitis, including hepatitis C (HCV) in patients who use drugs.

Keywords

- Opioid addiction
- Hepatitis C
- Syringes

INTRODUCTION

Opioid addiction is an ongoing public health problem across the United States. The sharing of syringes and needles is a major risk factor for transmission of viral hepatitis, including hepatitis C (HCV) in patients who use drugs.

Hepatitis C is prevalent across the world and can lead to chronic liver disease, liver cirrhosis and hepatocellular carcinoma. Methadone maintenance treatment (MMT) is effective in the reduction of heroin use and that of other opiate drugs; however, some patients suffer slips through their abstinence on methadone and use drugs and thus, are at risk for contracting de novo or be reinfected with viral hepatitis.

CASE DESCRIPTION

Accordingly, we established a hepatitis C clinic in close proximity to the methadone clinic to attend patients with chronic hepatitis C (C-HCV). The patients are referred to the clinic from the methadone clinic, where all the patients are screened for the infection, and are attended on the same day of the referral by dedicated physicians. During the first year, 35 patients were referred for treatment and nineteen were treated; of these, fifteen achieved a cure, which was associated with improvement of quality of life as assessed by the chronic liver disease quality of life questionnaire [1]. Nine additional subjects have been treated. The most common genotype was 1a. The direct-acting antiviral (DAA) drugs used were glecaprevir/pibrentasvir, sofosbuvir/velpatasvir, and sofosbuvir/velpatasvir/voxilaprevir in one patient who had experienced another DAA and had relapsed. Some patients reported nausea, abdominal pain and joint pain in association with the medications. There were no cases of drug induced liver injury. We did not note any drug interactions in our patients on DAA's. One patient self-discontinued his medication (i.e. glecaprevir/pibrentasvir), at four weeks due to joint pain. Despite counseling efforts, he refused to try another medication.

In the process of evaluation for C-HCV, one patient was identified as having hepatocellular carcinoma, which was

treated with radiofrequency ablation at the liver center of the patient's choice. In this regard, patients who were identified as having advanced fibrosis were enrolled in a program to screen for hepatocellular carcinoma in collaboration with the Division of Gastroenterology and Hepatobiliary Diseases. One patient experienced treatment failure with glecaprevir/pibrentasvir and was successfully treated with sofosbuvir/velpatasvir/voxilaprevir.

DISCUSSION

Up to 4% of the adult US population is estimated to misuse prescription opioids, and approximately 42,000 overdose fatalities in the United States were reported in 2016 [2]. C-HCV is common in intravenous drug users. Up to 70 % of people enrolled in methadone maintenance treatment programs have Hepatitis C, but only 11 % of these patients seek treatment for it [3]. We believe the methadone maintenance programs are a unique opportunity to identify and treat these patients in a clinic associated to the program to enable the clinicians to take the treatment to the patient rather than depend on the patient going to various specialty clinics, as it is documented that adherence to clinic appointments is low in the patient population described in this narrative.

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