Effect of Treatment for HCV on the Development of HCC in a Predominately African American Medical Center Population.

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INTRODUCTION

Chronic Hepatitis C Virus (HCV) infection can result in the development of liver cirrhosis and is a major cause for the development of Hepatocellular Carcinoma (HCC) in the United States. With the initiation of HCV treatment in 2014 by Direct Acting Antivirals (DAA) which are highly effective in clearing HCV infections and safe for administration to patients with cirrhosis, it is anticipated that the epidemiology of HCC will be shifting. Unfortunately, viral elimination may occur in a setting where the HCC development pathway has already begun.

Our objective was to determine whether achieving a sustained virologic response (SVR) in patients with cirrhosis prior to diagnosis of hepatocellular carcinoma (HCC) improved outcomes in our predominately African American population.

METHODS

We reviewed the medical records of 96 HCV patients diagnosed with HCC between 2015 and 2019 (Figure 1). Demographics, tumor size, treatment profiles, and outcomes following diagnosis were determined. Primary outcomes were defined as either alive, transplant or death/hospice. Tumor size was measured as non-small (> 5 cm or multiple tumors) or small (< 5 cm). The study was approved by the WSU IRB and data analysis performed using the SAS-IMP software.

RESULTS

Only 17 (18%) of the 96 patients with HCV who developed HCC, were treated for their HCV prior to diagnosis (Figure 1). There was no significant difference in the gender, race, and age of treated or non-treated patients.

Patients who were treated for their HCV prior to diagnosis were more likely to be alive in 2020 than patients who were not treated (47% compared to 19%; p = 0.0078; Figure 2).

There was no significant difference in tumor size between HCV treated or not treated patients (29% compared to 25%, p = 0.7297; Figure 3).

CONCLUSIONS

- Most patients with HCC in this study did not receive treatment for their HCV prior to HCC diagnosis, despite the introduction of treatment in 2014.
- Prior treatment of HCV in patients with cirrhosis leads to better outcomes than with no treatment. Even though tumor size is known to correlate with survival, tumor size at diagnosis was similar between treated and not treated patients. The reason for this discrepancy is not known.
- Since many of our cirrhotic patients treated for HCV with DAA have not yet developed HCC or have not yet reached a final outcomes, we will need to continue to expand and monitor our HCC patient population into the future analysis.