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**“Development of Hepatocellular Carcinoma in Hepatitis C Virus Patients”**

**Background:** Hepatocellular carcinoma (HCC) is the most common primary liver malignancy and is a leading cause of cancer-related death worldwide. In the United States, HCC is the ninth leading cause of cancer deaths. Regardless, of the etiology development of cirrhosis remains the most important risk factor for development of HCC and commonly presents in advanced stages. Common risk factors associated with developing HCC are hepatitis B and C virus, both independent risk factors for HCC. Despite advances in prevention techniques, screening, and new technologies in both diagnosis and treatment, HCC incidence and mortality continue to rise. Our study aims to examine the relationship between HCV and HCC, as well as disparities associated with each disease.

**Methods:** This is a retrospective chart review of patients 18 years or older testing positive for HCV and HCC at the University Medical Center, New Orleans, LA; between January 2015, and April 2021. Patient were separated into two groups HCV positive and HCC positive. We reviewed medical charts of HCV positive patients to determine if they went on to develop HCC. Then we review the medical charts of HCC positive patients to see if they had a prior diagnosis of HCV. We also collected basic demographic data including age, gender, race, and ethnicity. Insurance types were collected to stratify their socioeconomic status. Data was analyzed utilizing SAS 9.4.

**Results:** This is an interim analysis of 121 patients, 53 HCV and 68 HCC patients; 67% African American, 30% White, and 3% other races. Of all patients, 88% were male, 93% were insured and 96% not homeless. Mean age at the time of HCC diagnosis was 61 years. Regardless of group, 91% of all patients received treatment for HCC, (26%) surgery, (41%) interventional radiology (24%) chemotherapy. Of all patients, 43% of HCV and 41% of HCC patients experienced a delay ( $\geq 51$  day);  $p = 0.8062$ . Among both groups there was no correlation between treatment and demographics.

**Conclusion:** In our population, those diagnosed HCC were more often African Americans, males, age 60 years or older. Of all treatment options, interventional radiology was the most common. Surgery, a potentially curative modality, was utilized in only 26% of patients. While delay of treatment was not significant, almost half of patients in each group did experience a delay. Given delays  $\geq 3$  months are associated with worse prognosis in our study there is a need to improve follow up care for HCC patients.