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Critical Importance of Using FibroScan to Identify Patients with Cirrhosis in a Predominantly African American Patient Population

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The Role of FibroScan to Identify Patients with Cirrhosis in a Predominantly African American Patient Population

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INTRODUCTION

• Identifying patients with cirrhosis is complicated, but Ultrasound based Transient Elastography (TE; FibroScan) for non-invasive assessment of fibrosis may offer a more accurate approach than serum-based cirrhosis determination.

• The objective of our study was to use a FibroScan database to identify patients with cirrhosis in our primarily African American (AA) Hepatitis C (HCV) patients.

• Cirrhotic patients were used to compare FibroScan to serum assessments of fibrosis and to track outcomes for HCV patients.

METHODS

• Of 332 individuals with a FibroScan evaluation of fibrosis between 2014 and 2016, 79 (24%) had a score of >12.5 kPa (cirrhosis). Their electronic medical records were reviewed, risk factor for cirrhosis determined and outcomes evaluated.

• Data analysis was performed using the SAS-JMP statistical software.

• Serum based fibrosis was calculated using the AST to Platelet Ratio Index (APRI) and Fibrosis-4 (FIB-4) within a year of the FibroScan. An APRI score >0.7 and FIB-4 score >3.25 was used for predicting advanced fibrosis/cirrhosis.

RESULTS

Patient Population

Cirrhotic HCV patients were 92% AA and 52% male. FibroScan values ranged from 12.5 to 75 with a mean of 25.5 kPa for AA and 28.0 kPa for Non-AA. Most HCV patients (82%) were treated after their initial FibroScan with a high sustained virologic response (SVR) rate (97%).

Correlation between FibroScan Fibrosis and Serum Fibrosis Value

<table>
<thead>
<tr>
<th>African Americans</th>
<th>Non-African Americans</th>
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<tbody>
<tr>
<td>APRI</td>
<td>FIB-4</td>
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CONCLUSIONS

• FibroScan is better than serum-based assays for identifying early cirrhosis in HCV patients.

• Identifying regression of cirrhosis scores after HCV eradication is also a potential utility for the methodology.

• Regression of cirrhosis may predict decreased risk for decompensation, hepatocellular carcinoma and esophageal varices.

• Further studies evaluating the relationship between improvement in Fibrosis by FibroScan and the development of liver disease are needed.