

FIBROSIS STAGING IN YOUNG PWUD WITH HCV IS UNLIKELY TO CHANGE MANAGEMENT

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Background:

In the United States, phlebotomy-based tests of hepatic fibrosis are recommended before treatment for Hepatitis C virus (HCV). However, HCV-related hepatic fibrosis takes two to three decades to develop in the absence of another significant risk factor (such as viral coinfection or heavy alcohol use) and develops faster in those age ≥ 50 years. We sought to define an age threshold among rural people who use drugs (PWUD) at which phlebotomy-based tests were unlikely to reveal fibrosis.

Methods:

PWUD with history of HCV exposure were screened for enrollment in a telemedicine HCV treatment trial in 5 rural Oregon counties. Those with a detectable HCV viral load were included in the current analysis. Fibrosis was considered present in those with either equivocal or high likelihood for fibrosis, defined as FIB 4 ≥ 1.45 and APRI ≥ 0.5 . A Receiver Operator Curve relating age with presence of fibrosis was defined.

Results:

221 participants were screened for enrollment with phlebotomy-based labs. The sample was predominantly white (78.7%) and male (54.3%) with median age 42 years (range 20-72). FIB4 was < 1.45 in 197 participants. Twenty participants had FIB4 ≥ 1.45 and APRI ≥ 0.5 ; none of these were age ≤ 35 years (sensitivity=100.0%, specificity= 35.8%) and two occurred in those age ≤ 40 (sensitivity=90.0%, specificity= 50.2%). The area under the curve was 0.78 (Fig. 1).

Conclusion:

Hepatic fibrosis, defined by biochemical surrogates using conservative cut-offs, was uncommon in this cohort. Age as a simple test for fibrosis performed reasonably well. Among PWUD age ≤ 40 years, phlebotomy-based tests of hepatic fibrosis may not influence clinical decision making in HCV treatment. Paradigms which streamline HCV treatment initiation by de-emphasizing fibrosis staging could be considered in younger PWUD.

Disclosure of Interest Statement:

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Figure 1. Receiver Operator Curve relating age and hepatic fibrosis.

