

Letters to the Editor

Simplification in Hepatitis C Treatment

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To the Editor: Thank you to the authors for highlighting the important changes in the testing and treatment of hepatitis C virus (HCV) infection. The authors note that the advent of direct-acting antivirals has transformed HCV infection into a curable disease, and most patients who do not have cirrhosis or have compensated cirrhosis are easily treated in primary care.

The authors provide a simplified workup for treatment initiation; however, additional simplification may decrease the number of tasks a patient needs to complete before starting treatment. If a patient is unable to undergo some aspects of a complete workup (e.g., transient elastography, imaging), clinicians should consider skipping a comprehensive assessment because a virologic cure is likely to lead to an overall benefit.¹

Although a Fibrosis-4 (FIB-4) result of less than 1.45 is helpful to exclude advanced fibrosis, changing the cutoff for the Aspartate transaminase to Platelet Ratio Index (APRI) from 0.7 to 1.0 can decrease unnecessary additional testing.² Using a threshold of 1.0 is 76% sensitive and 72% specific for ruling out advanced fibrosis.³ Therefore, a patient with a FIB-4 of less than 1.45 or an APRI of less than 1.0 does not need additional hepatic assessment and can start treatment immediately. Several considerations influence which scores to use for which patient. FIB-4 incorporates age and therefore conservatively increases the likelihood of requiring additional testing and has been shown to outperform APRI.^{4,5} Preferring FIB-4 is a reasonable approach; however, it has not been validated in patients younger than 35 years or

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older than 65 years. For those patients, APRI should be used. Recent guidelines from the European Association for the Study of the Liver have suggested that confirming a sustained virologic response after the end of treatment can be omitted among those who do not have ongoing risk factors, especially if the patient faces barriers to completing laboratory testing.² Confirmation of treatment completion is the most important end point in HCV infection therapy because there is a strong correlation between treatment completion and cure (greater than 95%), even when patients are actively using substances.⁶

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References

- Epstein R, Taylor LE, Pramanick T, et al. Effectiveness and cost effectiveness of fibrosis staging for individuals with hepatitis C virus infection. The Liver Meeting. Accessed August 22, 2022. <https://aasldpubs.onlinelibrary.wiley.com/doi/epdf/10.1002/hep.32188>
- European Association for the Study of the Liver, Clinical Practice Guidelines Panel, EASL Governing Board Representative. EASL recommendations on treatment of hepatitis C. *J Hepatol*. 2020;73(5):1170-1218.
- Lin ZH, Xin YN, Dong QJ, et al. Performance of the aspartate aminotransferase-to-platelet ratio index for the staging of hepatitis C-related fibrosis: an updated meta-analysis. *Hepatology*. 2011;53(3):726-736.
- Holmberg SD, Lu M, Rupp LB, et al.; Chronic Hepatitis Cohort Study (CHeCS) Investigators. Noninvasive serum fibrosis markers for screening and staging chronic hepatitis C virus patients in a large US cohort. *Clin Infect Dis*. 2013;57(2):240-246.
- Wang CC, Liu CH, Lin CL, et al. Fibrosis index based on four factors better predicts advanced fibrosis or cirrhosis than aspartate aminotransferase/platelet ratio index in chronic hepatitis C patients. *J Formos Med Assoc*. 2015;114(10):923-928.
- Grebely J, Dalgard O, Conway B, et al.; SIMPLIFY Study Group. Sofosbuvir and velpatasvir for hepatitis C virus infection in people with recent injection drug use (SIMPLIFY). *Lancet Gastroenterol Hepatol*. 2018;3(3):153-161.

In Reply: HCV infection is a curable disease with straightforward regimens that can be supervised by family physicians due to the high sustained

virologic response rates of direct-acting antiviral therapy. Identifying patients infected with HCV and improving access to care and loss to follow-up are significant challenges. Implementing the new Centers for Disease Control and Prevention screening guidelines should identify more individuals infected with HCV.¹ Greater care participation by family physicians and other primary care specialists will help improve access. Our article focused on the American Association for the Study of Liver Diseases–Infectious Diseases Society of America’s simplified approach to hepatitis C treatment to encourage more primary care physicians to treat these patients.¹

According to the American Association for the Study of Liver Disease–Infectious Diseases Society of America and the European Association for the Study of the Liver guidelines, assessing the severity of liver disease in a patient with newly diagnosed hepatitis C is essential to determine the best therapy and follow-up plan.^{1,2} The recommended evaluation includes transient elastography (when available) and the appropriate blood test (APRI, FIB-4). Transient elastography is considered the gold standard, and FIB-4 is the best biochemical marker of fibrosis.^{1,3} You commented that FIB-4 had not been validated in patients younger than 35 years or older than 65 years, which questions the proper use of this test because 36.5% of adults with newly reported chronic HCV infections are millennials between 22 and 37 years of age, and 36.3% are baby boomers between 54 and 72 years of age. Generation X adults between 38 and 52 years of age comprise only 23.1%.⁴

We agree that a simpler evaluation, treatment, and follow-up approach for HCV infection would be advantageous. We expect modifications to the current protocol as new direct-acting antiviral-based research replaces the old ribavirin-based literature. A comprehensive review of the Consensus Cascade of Care for Hepatitis C would allow streamlining of the process from diagnosis to treatment and might improve the problem of loss to follow-up.⁵

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References

1. American Association for the Study of Liver Diseases–Infectious Diseases Society of America. HCV guidance: recommendations for testing, managing, and treating hepatitis C. Accessed May 22, 2022. <https://www.hcvguidelines.org>
2. European Association for the Study of the Liver, Clinical Practice Guidelines Panel, EASL Governing Board Representative. EASL recommendations on treatment of hepatitis C. *J Hepatol.* 2020;73(5):1170-1218.
3. Wang CC, Liu CH, Lin CL, et al. Fibrosis index based on four factors better predicts advanced fibrosis or cirrhosis than aspartate aminotransferase/platelet ratio index in chronic hepatitis C patients. *J Formos Med Assoc.* 2015;114(10):923-928.
4. U.S. Department of Health and Human Services. Viral hepatitis in the United States: data and trends. Accessed June 3, 2022. <https://www.hhs.gov/hepatitis/learn-about-viral-hepatitis/data-and-trends/index.html>
5. Safreed-Harmon K, Blach S, Aleman S, et al. The consensus hepatitis C cascade of care: standardized reporting to monitor progress toward elimination. *Clin Infect Dis.* 2019;69(12):2218-2227. ■