

---

# Hepatology

## Five Things Physicians and Patients Should Question

by  
Canadian Association for the Study of Liver Disease  
Last updated: July 2017



**1 Don't order serum ammonia to diagnose or manage hepatic encephalopathy (HE).**

High blood-ammonia levels alone do not add any diagnostic, staging, or prognostic value in HE patients known to have chronic liver disease.

**2 Don't routinely transfuse fresh frozen plasma, vitamin K, or platelets to reverse abnormal tests of coagulation in patients with cirrhosis prior to abdominal paracentesis, endoscopic variceal band ligation, or any other minor invasive procedures.**

Routine tests of coagulation do not reflect bleeding risk in patients with cirrhosis and bleeding complications of these procedures are rare.

**3 Don't order HFE genotyping based on serum ferritin values alone to diagnose hereditary hemochromatosis.**

Serum ferritin values reflect an increase in hepatic iron content and have a significant false positive rate because of elevations due to inflammation. Thus, in patients with evidence of liver disease, hemochromatosis genotyping should only be performed among individuals with an elevated ferritin and fasting transferrin saturation >45% (TSat) or a known family history of HFE-associated hereditary hemochromatosis.

**4 Don't perform computed tomography (CT) or magnetic resonance imaging (MRI) routinely to monitor benign focal liver lesions (e.g., focal nodal hyperplasia, hemangioma).**

Patients with benign focal liver lesions who do not have underlying liver disease and have demonstrated clinical (asymptomatic) and radiologic stability do not need repeated imaging as the likelihood of evolving into neoplastic lesions is very low. In contrast, patients with radiologic evidence of hepatocellular adenoma may have an increased risk of complications and/or neoplasia thus warranting closer observation.

**5 Don't repeat hepatitis C viral load testing in an individual who has established chronic infection, outside of antiviral treatment.**

Highly sensitive quantitative assays of hepatitis C RNA are appropriate at the time of diagnosis (to confirm infection) and as part of antiviral therapy, which is typically at the beginning and after therapy is completed to confirm sustained virological response at week 12 (SVR 12). Outside of these circumstances the results of virologic testing do not change clinical management or outcomes.

---

## How the list was created

The Canadian Association for the Study of Liver Disease (CASL) established a Choosing Wisely Task force in November 2015 to develop its list of recommendations felt to meet the goals of Choosing Wisely Canada. Members of this group were selected from the CASL Education Committee to broadly represent varying practice settings and subspecialty expertise within the field of Hepatology. Hepatologists with methodological experience in evidence-based medicine were also included. The working group solicited recommendations from CASL membership that should be considered for inclusion in the list of “Five Things Physicians and Patients Should Question”. Fifteen recommendations were then rated based upon judgments related to harm, benefit and excess resource utilization. Based on working group voting and literature review, a total of eight suggestions were identified with subsequent voting by CASL membership to generate the final top five recommendations. These recommendations were submitted and approved by CASL Governing Board and Choosing Wisely Canada.

---

## Sources

- 1 Lockwood AH. Blood ammonia levels and hepatic encephalopathy. *Metab Brain Dis.* 2004 Dec;19(3-4):345-9. [PMID: 15554426](#).  
Vilstrup H, et al. Hepatic encephalopathy in chronic liver disease: 2014 Practice Guideline by the American Association for the Study of Liver Diseases and the European Association for the Study of the Liver. *Hepatology.* 2014 Aug;60(2):715-35. [PMID: 25042402](#).
- 2 Northup PG, et al. Coagulation in liver disease: a guide for the clinician. *Clin Gastroenterol Hepatol.* 2013 Sep;11(9):1064-74. [PMID: 23506859](#).  
Tripodi A, et al. The coagulopathy of chronic liver disease. *N Engl J Med.* 2011 Jul 14;365(2):147-56. [PMID: 21751907](#).  
Yates SG, et al. How do we transfuse blood components in cirrhotic patients undergoing gastrointestinal procedures? *Transfusion.* 2016 Apr;56(4):791-8. [PMID: 26876945](#).
- 3 Adams PC, et al. Hemochromatosis and iron-overload screening in a racially diverse population. *N Engl J Med.* 2005 Apr 28;352(17):1769-78. [PMID: 15858186](#).  
Bacon BR, et al. Diagnosis and management of hemochromatosis: 2011 practice guideline by the American Association for the Study of Liver Diseases. *Hepatology.* 2011 Jul;54(1):328-43. [PMID: 21452290](#).
- 4 European Association for the Study of the Liver (EASL). EASL Clinical Practice Guidelines on the management of benign liver tumours. *J Hepatol.* 2016 Aug;65(2):386-98. [PMID: 27085809](#).  
Marrero JA, et al. ACG clinical guideline: the diagnosis and management of focal liver lesions. *Am J Gastroenterol.* 2014 Sep;109(9):1328-47; quiz 1348. [PMID: 25135008](#).
- 5 American Association for the Study of the Liver, Infectious Diseases Society of America. [HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C](#) [Internet]. 2016 Jun [cited 2017 Mar 15].

---

## About the Canadian Association for the Study of Liver Diseases

CASL is a non-profit organization that seeks to eliminate liver disease through research, education and advocacy. The membership includes hepatologists, gastroenterologists, pathologists, pediatricians, radiologists, scientists, surgeons, trainees and other interested people.



---

## About Choosing Wisely Canada

Choosing Wisely Canada is a campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care.

🌐 [ChoosingWiselyCanada.org](http://ChoosingWiselyCanada.org) | ✉ [info@ChoosingWiselyCanada.org](mailto:info@ChoosingWiselyCanada.org) | 🐦 [@ChooseWiselyCA](https://twitter.com/ChooseWiselyCA) | 📺 [/ChoosingWiselyCanada](https://www.facebook.com/ChoosingWiselyCanada)