HCV ECHO Case Recommendations

Session 6: March 17, 2025

Case Recommendations and Considerations:

CATEGORY	RECOMMENDATIONS	Relevant Presentation Question or Concern	REFERENCES/ RESOURCE LINKS
History	•		•
Physical Exam	• This case highlights the importance of keeping a broad differential. The patient initially presented with acute kidney injury presumably in the setting of volume depletion due to diarrhea. He did not have any other evidence of portal hypertension or advanced liver disease. In the process of investigating the etiology of the patient's acute kidney injury, it was discovered that he had a high amount of protein in his urine. Subsequently, he was found to have cryoglobulinemia which led to the discovery and diagnosis of HCV. • The definitive proof of the cause of kidney injury in this patient would be through pathologic examination of a kidney biopsy specimen. In this patient, who had severe anemia but is a Jehovah's witness and declines blood products based on religious beliefs, a kidney biopsy was not safe to perform • This highlights the importance of using the best available data to inform your clinical judgment, sometimes in the absence of definitive information. HCV treatment was started given confirmatory HCV RNA testing. The clinical hypothesis is that his	1. Did the patient have any physical exam findings that show evidence for vasculitis or advanced liver disease?	

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	cryoglobulinemia is due to HCV infection, not necessarily from renal disease.		
Diagnostic evaluation	• The fecal occult blood test is a tool designed to be used in the outpatient setting for colon cancer screening. The use of this test in hospitalized patients is not entirely supported by the evidence because of the resulting increased utilization of resources (like GI consults and endoscopies), without much higher diagnostic return. • Lipid panels can be unreliable in the acute care setting. In a patient who has risk factors for hyperlipidemia, normal or severely elevated levels should be integrated carefully in the patient's overall clinical picture. A repeat check once the patient is stabilized, perhaps in the outpatient setting, is a good strategy for follow-up. • It is important to remember that liver inflammation or liver fibrosis may appear similar to fatty liver in cross-sectional imaging studies such as CT scans or Ultrasounds. The use of transient elastography is the preferred non-invasive method of detecting the presence or absence of liver fibrosis.	1. For patients with unexplained anemia who are admitted to the hospital and unable to undergo endoscopy, is stool occult blood testing a good alternative? 2. Was the patient's lipid panel and HbA1c checked? 3. For this patient, how can you best interpret the finding from the CT of the abdominal and pelvis showing fatty liver?	• Barakat M, Aloreidi K, Gujjula S, et al. Overutilization of Fecal Occult Blood Test in the Acute Hospital Setting and its Impact on Clinical Management and Outcomes. Gastroenterology. 2020;159(2):e21-e22. doi:10.1053/j.gastro.2020.06.059 • Narayanan, Shreya MD1; Bertran-Rodriguez, Carlos MD1; Cavalaris, Charles P. MD1; Miller, Nicole L. MD1; Segarra, Chanlir MD1; Wright, Wesley MD1; Kumar, Ambuj MD, MPH1; Edwards, Jade S. MD2; Gomez-Esquivel, Rene D. MD1. S672 Diagnostic Utility of Inpatient Fecal Occult Blood Testing. The American Journal of Gastroenterology 117(10S):p e463-e464, October 2022. | DOI: 10.14309/01.ajg.0000859328.71467.b7
Medication Therapy & Adjustments	• While it is important to respect and honor the wishes of a patient consistent with their religious beliefs, for example patients who are Jehovah's Witness, it is still necessary	1. What is the best strategy for treating this patient?	•

	to promote best medical practice and have a risk/benefit discussion regarding treatment options, including transfusion of blood products. Sometimes such a patient may agree to receiving blood products, especially in situations that are life threatening. It is important to provide them with the opportunity for a discussion that will improve understanding of the consequences of acceptance or refusal of treatment. ● Either Glecaprevir / Pibrentasvir (Mavyret) or Sofosbuvir / Velpatasvir (Epclusa) are good treatment options. This is true even if the genotype results are not yet available as these agents are pangenotypic. ● The treatment schedules and "pill burden" for these two regimens are different and shared decision making is the best approach. Glecaprevir / Pibrentasvir (Mavyret) has a shorter duration, 8 weeks, but the regimen involves 3 pills/day. Sofosbuvir / Velpatasvir (Epclusa) duration is 12 weeks, but requires only 1 pill/day. ● Patients who are houseless are at risk of losing their medications because of theft, confiscation, or otherwise. It is good to recognize this and take steps to mitigate the problem. This can be with more frequent visits, limited pill dispensing, tighter case management, or offering storage if that is available. Additional steps like these will provide them with assistance to secure their medications and to prevent non-adherence or becoming lost to follow-up. ● Another strategy to help with compliance is with the use of pill organizers. These can additionally be tagged with date labels. This	2. Does being a Jehovah's Witness absolutely preclude a patient from getting treatment for anemia? 3. What is the best treatment option for this patient who is treatment naïve, has advanced liver fibrosis, kidney injury with unclear prognosis, opiate use disorder and unstable housing?	

	not only helps the patient with adherence but also helps with medication review by providing information on what days were missed and/or how many days of medication were taken.		
Vaccination	•		
Social Determinants of Health (SDOH)	• The concurrent treatment of HCV and opiate use disorder has been found to improve uptake of treatment for opiate use disorder and high rates of SVR. • Additionally, support systems through the syringe exchange program and linkage to care reaches the target population in a direct and positive way. Having a partnership with the liver center, addiction medicine, and community resources is a good strategy to reach at-risk patients and expand outreach for screening and treatment. This also helps streamline the pathway to treatment. • Syringe exchange programs are excellent community resources that expand the availability of services and treatment options for patients who are at greatest risk for acquiring HIV and HCV. Work is currently being done to assess how to improve HCV treatment integration into syringe exchange programs. • It is important to counsel all patients that re-infection is possible. The hepatitis C antibody is not protective for future infections. Theoretically, a patient may be infected repeatedly. However, only a small percentage of patients get re-infected in the real world. • The patient presented is a good example of the possible reason for the discordance in	1. What is the best method of approaching the initiation of therapy in patients with complex social determinants of health? 2. How can co-management of opiate use disorder impact adherence to HCV treatment? 3. What harm reduction approaches can be taken for the prevention of hepatitis C transmission via IV drug use? 4. Does a syringe exchange program improve adherence to treatment and substance use cessation? 5. Is there a possibility of	• Rosenthal ES, Silk R, Mathur P, et al. Concurrent Initiation of Hepatitis C and Opioid Use Disorder Treatment in People Who Inject Drugs. *Clinical Infectious Diseases*. 2020;71(7):1715-1722. doi:10.1093/cid/ciaa105

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	the theoretical likelihood of repeat infections vs. the small observed percentage of re-infections. Many patients who get HCV treatment are observed to be motivated and highly engaged with their health compared to their prior behaviors with a reduction in risk exposure. Additionally, the treatment of 1 patient helps in the prevention of HCV transmission to about 20 other persons-at-risk, which also helps in the cycle of re-infection.	re-infection with hepatitis C after cure if a patient's unsafe syringe use continues?	
Behavioral Health	•		
Screening	• Taking into account the availability of resources in a community, concurrent treatment through addiction medicine may be the most patient-centered option to start treatment as soon as possible. • A strong collaboration and partnership between a liver center and addiction medicine resources are helpful and important. • Communicating effectively and re-connecting a patient with their primary care provider is consistent with most insurance models. The PCP can then help coordinate specialty care and arrange for appropriate post-treatment screening and surveillance.	1. If a patient is concurrently being treated for substance use disorder and HCV through an addiction clinic, who will take care of post-treatment screening and surveillance?	
Risk Reduction	•		
Other	•		

PLEASE NOTE that case consultations and recommendations for the HBV ECHO do not create or otherwise establish a provider-patient relationship between any participant, Hawaii Learning Groups, and/or any other clinician on the HBV ECHO faculty.