HCV ECHO Case Recommendations

Session 5: March 3, 2025

Case Recommendations and Considerations:

CATEGORY	RECOMMENDATIONS	Relevant Presentation Question or Concern	REFERENCES/ RESOURCE LINKS
History	• The patient's history is ambiguous. He has a chart diagnosis of cirrhosis. A detailed review of the documentation, though, suggests he does not have advanced liver disease. Additionally, his history also does not appear to suggest prior episodes of decompensation.	1. Does the patient presented have a history consistent with advanced liver disease?	
Physical Exam	• The etiology of mental status changes can be multifactorial. • This is also true in patients who are at risk of or have advanced liver disease because not all causes of encephalopathy can be attributed to the liver. A thorough history and chart review is always a good first step. Factors include medications, family history, alcohol and substance use, toxin exposure, and travel. • In a patient who has a history of prolonged alcoholism presenting with memory issues, Korsakoff syndrome should be considered. This can present with dense amnesia and is characterized by confabulation. The patient makes things up to fill in the gaps in memory. • Brain imaging may provide further clues that support a neurologic cause for a patient's change in mental status.	1. How should we think through the possible causes of encephalopathy in a patient who is at-risk for or have advanced liver disease?	
Diagnostic evaluation	• Reduced platelets are seen in patients with advanced liver disease, but patients with advanced liver disease and a history of	1. What is the expected platelet count in a patient with suspected advanced liver	

	splenectomy may have a higher than expected platelet count compared to cirrhotic patients without splenectomy. In this patient, the levels between 400-700 are high and may suggest an undiagnosed secondary pathology warranting further evaluation. ● In this case, where there is a rise in albumin levels, one should be cautious to conclude that the patient has advanced liver disease. Other factors may have contributed to the patient's prior measured low albumin levels such as hospitalization, infection, other states of systemic inflammation, or malnourishment. ● Conversely, a thorough review must also be taken to ensure that there were no extraneous variables that may have contributed to the now-normal albumin level, for example an albumin infusion. If the history does not suggest an additional treatment, the most likely explanation is that the patient did not have synthetic dysfunction to begin with and that the initial finding of low albumin was due to something other than advanced liver disease. ● Yes, patients with cirrhosis and portal hypertension can have duodenal varices but it would be unusual to have duodenal varices without varices found elsewhere. ● Yes, NSAID use can be an etiology / cause of a perforating duodenal ulcer.	disease and a history of splenectomy? 2. In a patient with suspected advanced liver disease, who now presents with normal albumin levels, how can this increase be explained? 3. Can a patient with advanced liver disease and portal hypertension have duodenal varices? 4. Can NSAIDs be a cause of a perforating duodenal ulcer?	
Medication Therapy & Adjustments	● Yes, if the patient is willing to undergo treatment with a reasonable expectation for compliance, treatment can be initiated right away without additional work-up. The patient's history and review of documentation is not consistent with advanced liver disease and hepatology referral is not necessary at	1. Is an elderly patient with chronic hepatitis C infection and a past medical history significant for alcoholism, upper GI bleed due to duodenal ulcer, partial splenectomy, chronic back pain, history of polysubstance use,	

	this time. For this patient with a history of a GI bleed due to a duodenal ulcer and without a recent follow-up EGD, he would benefit from continued PPI. With the bleed being 5 months ago and no further NSAID use, the PPI may be safely decreased to once daily dosing. Mavyret would be the DAA choice while continuing a PPI as it does not rely on stomach acidity for absorption. ● A review of the indications and simplification of the regimen of his psychoactive medications may also help address changes in his mental status. Referral to a chronic pain specialist may be beneficial as the majority of his psychoactive medications are used to treat pain. ● He should have an evaluation for Korsakoff's amnesia by someone familiar with this condition. He may benefit from neuropsychiatric testing to confirm the diagnosis. ● The intake of acetaminophen (Tylenol) is safe for patients with liver disease as long as the dose does not exceed 2 grams per day. On the other hand, one should be cautious about the use of NSAIDs in patients with advanced liver disease as this can cause GI bleeding, kidney injury, and potentially hepato-renal syndrome as well.	memory problems, and a complicated social history a good candidate for HCV treatment? What is the best treatment regimen? 2. How else can we best optimize this patient's treatment regimen? 3. Is acetaminophen safe for patients with liver disease? How about NSAIDs?	
Vaccination	●		
Social Determinants of Health (SDOH)	● During treatment, the patient will benefit from close monitoring. This may come in the form of a patient navigator or from strategies that provide more frequent follow-up, phone contract and coordinating with his wife. He will benefit from a pill organizer.	1. How can we help the patient ensure compliance and close follow-up?	

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Behavioral Health	•		
Screening	•		
Risk Reduction	•		
Other	•		

Didactic on Pharmacy-Based and Community-Based HCV Care:

1. **How do clinical pharmacists support the current treatment efforts for HCV?**

The role of the clinical pharmacist in support of HCV treatment efforts is extensive and important. This is primarily accomplished by protocol driven support. Pharmacists help in treatment planning in multiple areas including assessment of degree of fibrosis with elastography, drug interactions review, follow-up laboratory testing to document sustained virologic response (SVR), and the development of order sets and clinical decision support tools. They assist with prior authorization and with the coordination of refills.. They help coordinate efforts for consultation or other requirements set forth by insurance companies for treatment approval. They are instrumental in the drive for vaccination against HAV and HBV. They can assist with community outreach and screening efforts.

2. **How does a pharmacist-led treatment approach work in the current treatment efforts for HCV?**

The first step is the referral of the patient to a pharmacy team. The pharmacy team then develops a treatment plan which is sent to the referring provider for approval. After the approval, the pharmacy team takes care of the patient's treatment regimen including follow-up. At West Hawai`i CHC, buy-in was necessary for this approach to be successful in addition to close coordination with the support systems of the health center. This allowed for providers to have increased time dedicated to complicated patients.

Electronic tools have been instrumental in helping achieve success with this approach. Order sets, preference lists, and standing orders specific to HCV screening, diagnosis, treatment, and follow-up are employed. This helps providers order the right test at the right time. Health reminders help ensure the correct screening recommendations are followed. Vaccine reminders as part of the health maintenance prompts assist in vaccination against HAV and HBV. The EHR integrates with the Hawaii Immunization Registry to allow for consolidation of data.

3. **How do pharmacists assist in the delivery of hepatitis C care in the State of Hawaii?**

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Under the collaborative practice agreement, pharmacists can order laboratory and other diagnostic tests. Pharmacists can initiate and adjust drug regimens and provide consultation services to patients and providers. Pharmacists can administer medications and immunizations. Pharmacists can prescribe and dispense naloxone, for example, and can provide emergency contraception.

According to the Center for Health Law and Policy Innovation of Harvard Law School (CHLPI) and the National Viral Hepatitis Roundtable (NVHR) (https://stateofhepc.org/) for Medicaid patients, the State of Hawaii has been awarded a grade of A for access to Hepatitis C treatment. This 2024 assessment is based on the absence of most prior authorization requirements for hepatitis C treatment. PCPs who follow the AASLD-IDSA guidelines are waived from these requirements (see https://www.hawaiilearning.org/hcv-slc-echo-2025-resources/).

There are several bills in the State Legislature to support pharmacists in their work to increase access to quality hepatitis C care. Particularly important is SB1245 which will provide the legal framework for pharmacists to get reimbursement for the work that they do in providing hepatitis C care. Viral hepatitis elimination efforts are not currently funded in the State of Hawaii. SB1431/HB1112 establishes and appropriates funds for a hepatitis prevention program within the DOH. Please visit www.capitol.hawaii.gov/home.aspx to submit your testimony in support of these bills.

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.