

HBV ECHO Case Recommendations



Session 6: October 3, 2022

Case Recommendations and Considerations: 55 y/o Thai male with CHB, eAg negative; concomitant NAFLD, pre-diabetes and ASVD

CATEGORY	RECOMMENDATIONS	Relevant Presentation Question or Concern	REFERENCES/ RESOURCE LINKS
History	<ol style="list-style-type: none"> 1. Clearance of HBsAg in eAg negative patients: in those on NUCs for at least 3 years: (year 2024 for this case) you could check quantitative HBsAg levels. If HBsAg quant is <100 IU/mL, then you have 33% chance of clearing HBsAg after 4 years off therapy 	<ol style="list-style-type: none"> 1. What are predictive factors for which patient with CHB inactive carrier phase will turn to immune clearance phase? 	<p>HBsAg Loss as a Treatment Endpoint for Chronic HBV Infection: HBV Cure</p> <p>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9029793/</p> <p>Source from Dr. Amy Tang:</p> <p>Durability of Hepatitis B Surface Antigen Loss With Nucleotide Analogue and Peginterferon Therapy in Patients With Chronic Hepatitis B (Anna Lok)</p> <p>https://aasldpubs.onlinelibrary.wiley.com/doi/10.1002/hep4.1436</p>
Physical Exam	<ul style="list-style-type: none"> • 		
Diagnostic evaluation	<ol style="list-style-type: none"> 1. An increase in viral load along with increase in ALT is suggestive of HBV, whereas if ALT were to improve with a trial of 5-10 lbs weight loss this may suggest NASH due to NAFLD instead. If ALT returns to normal and DNA is suppressed after starting antiviral therapy, then it is likely you have fatty liver without steatohepatitis 	<ol style="list-style-type: none"> 1. How can we differentiate NASH and CHB reactivation in this patient? 2. What tests can we use to predict HBV related inflammation in a 	

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	<p>2. In HBeAg negative chronic hepatitis patients, doing lab once per year for surveillance is inadequate. Dr Tsai performs surveillance labs at least every 6 months, but if possible, it's even better to do them every 3 months in the first 1-2 years. Dr. Tran tends to check labs every 3 months for a year after initial consultation, and then every 6 months after that for CHB, eAg negative patients.</p>	<p>patient with CHB and NAFLD for initiating antiviral therapy?</p>	
Medication Therapy & Adjustments	<ol style="list-style-type: none"> 1. Based on Asian American Treatment Algorithm, treatment is indicated (due to elevated ALT >ULN and DNA levels >2000 IU/mL). Despite unknown genotype/mutation profile, due to concurrent NAFLD, you would benefit from treatment as this will reduce your future risk of liver cancer 2. Trend ALT, DNA level, and total bilirubin overtime to follow fluctuations in lab data when making the decision to treat. Pay attention to the bilirubin, which if over 3 should indicate starting treatment if a flare occurs but you are unsure if you should treat right away. If bili > 3 it should indicate immediate treatment 3. Based on flowsheet data, July 1 2020 is when treatment should have been initiated due to elevated ALT and DNA levels at the time 	<ol style="list-style-type: none"> 1. When is the best time to start NUCs in HBeAg -ve CHB infection? 	<p>Asian American Treatment Algorithm: https://www.hawaiilearning.org/wp-content/uploads/2022/08/Tong-Article_APT-47-1181.pdf</p>
Vaccination	<ul style="list-style-type: none"> • 		
Social Determinants	<ul style="list-style-type: none"> • 		

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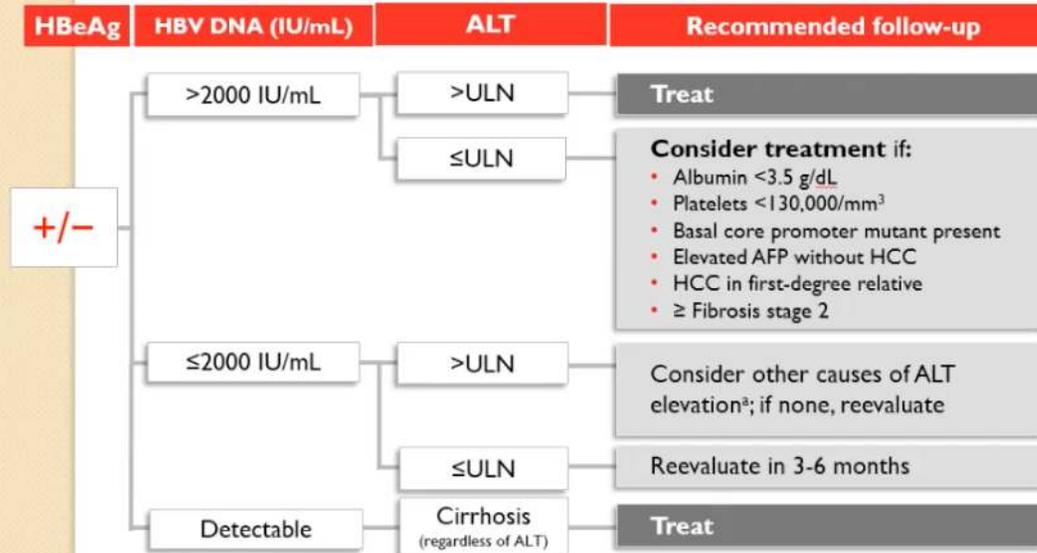
of Health (SDOH)			
Behavioral Health	<ul style="list-style-type: none"> • 		
Screening	<ol style="list-style-type: none"> 1. In CHB patients, after age 40 you should have AFP and abdominal US every 6 months for HCC surveillance. A baseline US abdomen should be obtained at the time of diagnosis. If there is cirrhosis, then HCC screening should begin earlier 		
Risk Reduction	<ul style="list-style-type: none"> • 		
Other	<ol style="list-style-type: none"> 1. Hepatitis C genotype 3 has a correlation between the virus and the degree of fatty liver. Unclear if HBV is related to fatty liver. 	<ol style="list-style-type: none"> 2. Can CHB induce NAFLD? Can NAFLD induce CHB viral replication? Is there a relationship between HBV and fatty liver? 	

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.

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Asian American Treatment Algorithm Updated and Simplified



* Include medications, supplements, non-alcoholic fatty liver disease, alcohol intake, or other viral etiologies, such as hepatitis A virus, HCV, HDV, HIV, Epstein-Barr virus, and cytomegalovirus.

Tong MJ, et al. *Aliment Pharmacol Ther.* 2018;47:1181-1200.