Improving Time to Treatment Initiation for Viral Hepatitis (HBV, HCV, and HDV) Through Screening and Diagnosis

CMEO Podcast Transcript

Faye Jackson:

Hello, and welcome to today's first of four CME Snack programs on linking knowledge to action in the screening and management of Viral Hepatitis. I'm your avatar host, Faye Jackson. Today you will hear perspectives from expert clinicians and researchers from Asia, Europe and North America, moderated by Dr. Sue Wong and Dr. Heiner Wedemeyer. I'll pop back occasionally to administer audience response questions, offer SMART goals, and provide a sneak preview of the other programs in this series. Please note this program was recorded prior to the November 2025 liver meeting held in Washington, DC. Key takeaways relevant to our continuing medical education program today are shown on your screen for reference.

Su Wang, MD, MPH, FACP:

Hi, everyone. My name is Dr. Su Wang, and I'm the Medical Director for our viral hepatitis programs and the Center for Asian Health at Cooperman Barnabas Medical Center, which is in New Jersey, USA.

Maria Buti, MD, PhD:

I am Maria Buti. I am an hepatologist based in Barcelona in Spain, in Hospital Universitario Valle de Hebron. I have been working in the field of viral hepatitis for many, many years, particularly in screening diagnosis, linkage to care and treatment for Hepatitis B, C, and delta.

George Lau, MD:

I'm George, I'm George Lau, and I graduated from the University of Hong Kong in 1987. I have been working as a hepatologist for more than 30 years, and I also work in China. I'm Chair Professors in Beijing and also Shanghai, and I operate my private clinical trial center now in Hong Kong and working on advancements of drug discoveries and so ons in liver diseases.

Heiner Wedemeyer, MD:

So, my name is Heiner Wedemeyer. I have the privilege to Chair here at Hannover Medical School in Germany, the Department of Gastroenterology, Hepatology, Infectious Diseases and Endocrinology. I've been working here for quite some years. In Hannover, many of you may know that we have a long-standing interest in viral hepatitis being involved both in translational research as well as in clinical trials on hepatitis B, C and delta. These are the topics of today's series.

Debika Bhattacharya, MD, MS:

My name is Debika Bhattacharya. I'm a physician scientist who does infectious diseases and I'm based here at University of California Los Angeles (UCLA) in the great state of California in the United States. My work is largely around directing a viral hepatitis program in a large integrated healthcare system. And then my research is focused on HIV and viral hepatitis coinfection, primarily HIV and hep B coinfection and with a focus on

pregnancy and outcomes within pregnancy. However, we do do a lot of hepatitis C screening, linkage to care and treatment in our setting, and I'm really excited to be able to talk to you all about it today.

Jean-Michel Pawlotsky, MD, PhD:

My name is Jean-Michel Pawlotsky. I'm a hepatologist by training. I became a virologist by profession and doing both jobs together as well as I could. Currently, I'm the Head of the Department of Biology and Pathology in the Henri-Mondor University Hospital, which is one of the major university hospitals in the Paris area. I am also head of a research unit related to Inserm, our National Institute for Health. The title of our research unit is viruses, hepatology, cancer, so we're right in the right topic.

Su Wang, MD, MPH, FACP:

Yeah, without further ado, let's get started. We're going to talk about all the guidelines for B, C, and delta. This is more of a question about how the latest international guidelines for hep B, C, and delta diagnosis and management are being implemented in your region and what challenges remain in translating them into everyday clinical practice because this is the big thing, right? We've got great guidelines, but how do we actually implement them?

Maria Buti, MD, PhD:

Yeah. This is a big question. As you know, Spain is located at the south of Europe, and we follow usually European Association for the Study of the Liver (EASL) guidelines or EASL recommendations. Regarding the different guidelines, the hepatitis C guidelines are very, very well-implemented in Spain. We also have national guidelines that are very, very similar to the EASL guidelines. I think now for hepatitis C is easy. Guidelines are very simple, easy to apply and everybody can understand. Regarding hepatitis B guidelines, this is a more complex field.

Heiner Wedemeyer, MD:

I think the last update of the hepatitis C virus (HCV) guidelines, you call it final version. Maybe it would be … what are your thoughts? How was the journey of developing these guidelines? Do you still think that you published the final version of the HCV guidelines before coming back also to the other hepatitis viruses? But maybe it is interesting to the audience to learn a little about the HCV guidelines and the history.

Jean-Michel Pawlotsky, MD, PhD:

Yeah. It's a great question. Obviously this endeavor has been fantastic. You were involved in it. We've been both involved in writing these guidelines. Just as a reminder, we did not call them guidelines because the field was moving very rapidly. I think what was original in this challenge that we call them recommendations and decided to update them as often as necessary because the field was moving very rapidly. But like any field that moves very rapidly, at some point the field stabilizes. I think the HCV field has really stabilized, and what we call the final version of the recommendations is in fact a real clinical practice guideline.

Honestly, except for minor points that could be changed or precise, then this can be done in a supplement and addendum or whatever. I think the guidelines very up-to-date, very applicable and they have allowed us to make

a lot of progress in patient care. So, yes, to give a short answer to this question, these guidelines in my opinion are final. Couple of few small things could be added, but we'll not have to write them again, which is not the case of the other EASL guidelines which have been issued recently. Honestly, if I were in charge, I would've called them recommendations because I need for both hepatitis D and hepatitis B virus updates will be necessary on a regular basis.

Su Wang, MD, MPH, FACP:

Hi, let's talk a little bit about where the guidelines are going and what you've seen in terms of the other international guidelines for hepatitis B, C, delta and what challenges you might see in translating them to practice. Maybe where you said, I know you can't give away exactly what the Asia guidelines are going to be, but I was honored to be on the … to hear about the meeting and hear a lot about the push towards expanding treatment eligibility. So, yeah, tell us what your thoughts are about the international guidelines?

George Lau, MD:

I was first involved in the guidelines in the Asia Pacific Association for the Study of Liver (APASL) in 1998. At that time, so we have our first consensus meeting on writing the guidelines on hepatitis B and C and delta. That was our first guideline. At that time, the initiative was really the availability of nukes (nucleoside reverse transcriptase inhibitors – NRTIs) comes into the situations, namely lamivudine, and then this was followed by others nukes. Nowadays, we don't talk about the lamivudine, we talk high-resistant barriers nukes such as entecavir, tenofovir or tenofovir alafenamide (TAF).

But this is a long process and lots of data was accumulated and we write guidelines who should be treated and what we should use to treat those patients and how to monitor those patients and when can we stop therapy. But the ultimate goal, even at that time, and I think this is the major issue, is to see a reduction of hepatocellular carcinomas or end-stage liver diseases related to chronic hepatitis B with the availability or the proper usage of these antivirals. Now, in 2025, we are going to change the practice with our new guidelines because having those guidelines with all the screening methods, which is now easily available, we are not seeing reductions in hepatocellular carcinomas due to chronic hepatitis B. In fact, or there is a new projections recently in the Lancet Commissions that we might be seeing more hepatocellular carcinomas by 2040.

Su Wang, MD, MPH, FACP:

Yeah. The World Health Organization (WHO) reported that too …

George Lau, MD:

That's right. That's not the good news at all.

Su Wang, MD, MPH, FACP:

No. We have to pivot, right? I think that data really compels us to do, to change our approach. Yeah.

George Lau, MD:

Right. The guidelines are important because people learn about the guidelines, it's based on evidence and based on experts, and so it would affect the policymakers, affect the doctors treating patients and also the patient's attitudes towards therapies and also the response from our society. It's very important that we need to modify I would say the guideline accordingly, so that we can see reductions in the outcomes of chronic hepatitis, undesirable outcomes of hepatitis, for hepatitis B that is hepatocellular carcinomas and end-stage liver cirrhosis, and that's what we're working on.

Su Wang, MD, MPH, FACP:

That's great. No. I think it's important to hear about the history of it. I think some of the conversation I was hearing about with the Asian guidelines, it's really important to bring in real-life data as you're talking about. So, what are the, I guess the remaining challenges? We've got great therapies that work, and so what have been the challenges? Why are liver cancer rates going up? How do you think the newer guidelines will help to reduce those, right? I think there's been some discussion about decentralizing care, right? Getting care out to the frontline providers. Maybe you can talk about how guidelines, are we simplifying them? How are we making it so that we can get more people treated?

George Lau, MD:

This is a very good question. I think that's first of all, now we are seeing a change in landscapes of chronic hepatitis B since the impact of vaccinations. As I mentioned at the very beginning, we start to have universal vaccinations in 1984 to 1988, and then fully implemented differentially in different countries in Asia-Pacific region. Even in China, different areas have this universal coverage at different time point. Now, having said that, with the vaccinations, we are seeing a changing patterns with more, say for instance, E-negative disease, aging populations. Also, I think that we are now having comorbid factors such as a fatty liver. In Asia-Pacific regions, we termed non-alcoholic fatty liver disease (NAFLD) and the U.S. and Europe they call it metabolic dysfunction-associated steatotic liver disease (MASLD), but the essence is the liver gets further damage from the accumulations of steatosis and also from alcohol.

So, this might be one of the issues. Second issue which our guidelines is now dealing with and with our experience, as I said in the past 20, 30 years, is those guidelines are based on evidence at the time when we do not have so many biomarkers. Say for instance, the sensitivity and linearity of HBV DNA quantifications is completely different when we start to have all those landmark studies 20, 30 years ago and which the evidence was based on. Also, we do not have other biomarkers which is now easily available, such as the quantitation to hepatitis B surface antigen. It's not there. Thirdly, and very importantly, we all know that in chronic liver disease, the degree of liver fibrosis is the most important prognostic factor. It is not until recently that non-invasive testing was made available either by blood tests or by imaging techniques such as the FibroScan by the Echosens or the FibroTouch in China or magnetic resonance imaging (MRI) technology, which allows us to have a proper assessment of the degree of liver fibrosis.

So, these are... Lots of factors was not taken into considerations when we advocate who should be treated and what to use as treatment and how to guide our therapy. Fourthly, because of the drug registration process, at that time, I was also involved in all the antivirals in terms of pegylated interferons or nukes or developments. They have a fixed time period, 48 weeks for the drug approval process. But in reality, this is a completely

different story. We need to know how to tailor made a therapy for our patients in a more individualized way. There's a lot of issues that we need to advance. I think one of the key issues is the reliance on HBV DNA and our guidelines, which is in development is going to get rid of the HBV DNA quantifications. It's a lot.

Su Wang, MD, MPH, FACP:

Wow. That's huge.

George Lau, MD:

Yes. Because you have to be practical. HBV …

Su Wang, MD, MPH, FACP:

Right. That test is expensive and difficult to get in many settings, right? Then especially in settings where we have high burden of hepatitis B and you don't want to hold people hostage, right, just because they can't get a DNA test frequently. Yeah.

George Lau, MD:

That's right. That's right. It also fluctuate. It does not stay there.

Su Wang, MD, MPH, FACP:

Exactly. Yeah. Yeah.

George Lau, MD:

The monitoring might be more expensive than the treatment itself.

Su Wang, MD, MPH, FACP:

Exactly, which is... Yeah. I think it's such an important thing to bring up, right, that that's a real-life limitation. And so, we're having these conversations in Africa too, right? If it's way easier to just start treating somebody than wait for the viral load, and so, why would we not use a tool that works rather than wait for that? I feel like there needs to be some tailoring of the evaluation to the settings.

Heiner Wedemeyer, MD:

So, my, my first questions would be around your general strategies, your guidelines, the importance of guidelines in the end in clinical practice. Do you have your local rules? Do you apply, I don't know, American Association for the Study of Liver Diseases (AASLD) guidelines? Do you look for WHO guidelines? How are you, let's say, managing your viral hepatitis patients and which guidelines do you follow in clinical practice?

Faye Jackson:

Before we continue, here is a question for you, our audience. Which of the following AASLD guideline recommendations for viral hepatitis screening differs most clearly from European and Asian guidelines? Is it A,

one time universal HCV screening for all adults aged greater than or equal to 18 years regardless of risk factors. B, risk-based HBV screening, limited to high activity regions and known risk groups. C, annual HBV and HCV screening for all adults over 40 years of age. D, screening only in symptomatic patients or those with abnormal liver tests. Or you aren't sure. Go ahead and register your answer now.

And the correct answer is A, one-time universal HCV screening for all adults age 18 or older. This recommendation is regardless of risk factors and reflects United States epidemiology and the high proportion of undiagnosed cases. Now, let's return to our program.

Debika Bhattacharya, MD, MS:

That's a great question, Heiner. I think for hepatitis C, I think that's pretty straightforward. We follow the co-endorsed AASLD and Infectious Diseases Society of America (IDSA) treatment guidance document, which has been there for several years now and really has a very diverse panel of thought leaders that contribute to its implementation and its design. And it really I think is the norm. There are other integrated health systems that have their own guidelines, but I think by and large, the AASLD, IDSA hepatitis C treatment guidance is what we use. Now, in hepatitis B, I think it feels like the ground is shifting a little bit. We do still use the 2018 AASLD hepatitis B treatment guidelines document that is undergoing a revision, as you know, will hopefully be out later this year in its finalized form.

That also coincidentally has now also been co-endorsed by IDSA for the first time in its history, taking its cue, if you will, from the hepatitis C guidance. But I think what's been interesting about the hepatitis B guidelines is that the WHO guidelines came out in 2024 and really I would say threw down the gauntlet for what expanded treatment access could look like. I think many of us are... I think I would use the word grateful to have these two different sets of guidelines to be able to reference because I think what that really allows us to do is to have a really patient-centered discussion about hepatitis B treatment options. Now, keep in mind I come from the infectious diseases and HIV perspective where we basically say, "Virus equals bad equals we need to treat."

I understand my colleagues thoughts on why... Obviously that doesn't hold for every person with hepatitis B, but what I think the new WHO hepatitis B guidelines really gave us the permission to do is to really present a different set of guidelines to patients and to say, "Look, there really are options." Before we used to say, "Well, you have to..." We still do, but we say, "Your E antigen is this. Your HBV viral load is this. What was your alanine aminotransferase (ALT)? How often did we check it? When is it elevated?" Now I think we can more comfortably say there are these guidelines, AASLD guidelines, but there are also these other set of guidelines, the WHO guidelines, that allow for expanded access. What do you want to do? What would you be comfortable doing? Then it allows us to take that conversation a little further.

Heiner Wedemeyer, MD:

I think this patient-centered view is very important. You may know in Europe we have the new updated HBV EASL clinical practice recommendations guidelines, and we had quite some discussion because obviously we want to make things simple. You just mentioned we're talking about infectious diseases, but on the other hand, we don't not want to over-treat individuals. Therefore, I think these guidelines are important. I understand you have a lot of experience. You use recommendations, guidelines in a reasonable way, but when you look in your... Let's say the general practitioners in California, are they aware of these guidelines? Do they know which patient

they have to send to your center where they could start maybe treatment on their own? What are the importance of these guidelines beyond your academic centers?

Debika Bhattacharya, MD, MS:

I think that's a really great question, and I'm going to take another step back even before we go into the management guidelines. I also want to reference some updated guidelines that we have in the U.S. around universal hepatitis B screening.

Faye Jackson:

Before we continue, let's hear from Asia Sullivan, a nurse practitioner in California who has been at the forefront of implementing recent Centers for Disease Control and Prevention (CDC) guidelines for universal panviral screening for hepatitis, B, hepatitis C, and HIV, Ms. Sullivan.

Asia Sullivan:

My name is Asia Sullivan. I'm a certified physician assistant here in the Los Angeles area, and our practice does cater to the LGBTQ+ community, but of course we see patients of all walks of life in all sexual orientations and genders. In that line of work, screening for infectious disease, including HIV and hepatitis B and C, is some of the bread and butter of what we do every day. We try to incorporate a strategy of panviral screening whenever we can. To us, that means incorporating screening for these conditions as just part of a normal workup. It's not anything that a patient has to ask for. It's something we offer right off the bat.

We try to take an opt-out testing strategy. Anytime a patient comes in, whether that is for just a routine annual physical or a check-up, as they like to call it, or if they're here specifically for sexually transmitted infection (STI) screening or concerns about sexual health, that is something we just immediately say, "Great. Okay. We're going to do some blood work. We're going to go ahead and screen you for conditions like HIV and hepatitis," and just keep the conversation moving. I would say that's been a really successful strategy. We almost never have patients opt out of that, even if they may not necessarily be a high-risk population. We just offer this to everyone as part of a routine visit and try to keep it moving, and that's been very successful for us.

Faye Jackson:

Thank you, Ms. Sullivan. Now let's return to our faculty discussion.

Debika Bhattacharya, MD, MS:

So, again, another 100,000-foot view, many of you will remember in 2020, the CDC and United States Preventative Services Task Force (USPSTF) recommended one-time hepatitis C screening in 2020. Then in 2023, the CDC recommended universal hepatitis B screening. Both of those recommendations are centered around two points. One is that the opioid use and injection drug use epidemic in the United States unfortunately is continuing. Two, I think we don't always realize what individual's risk factors are in terms of hepatitis C or hepatitis B, risk of having hepatitis C or hepatitis B disease. So, they expanded the screening recommendations.

And so, let me start there because I will say that there is more knowledge I would say about hepatitis C universal screening than there is I would say about hepatitis B universal screening, certainly in my setting at an academic

healthcare center. I think that's the first piece, right, is you have to be able to remind our colleagues that screening for hepatitis B is important. And then once that has been accomplished, I think by and large, one of two things happen, right? It can fall in a busy provider's day and it just be a chart, oh, this person has hepatitis B. Okay. Let me just... There are 1000 other things to discuss today. Let me just address it the next visit. Or, somebody could refer on to Infections Diseases (ID) or hepatology. But it is rare, I would say, in the U.S. that the primary care provider is taking on the role of hepatitis B treatment. A little bit more with hepatitis C, but not with hepatitis B yet.

Heiner Wedemeyer, MD:

Yeah. That's the same I think in our country that it's very rare that general practitioners (GPs) are in the end treating these infections, but when we will come back to this cascade of care where we lose some individuals. You mentioned that you had these recommendations in 2020, '23 for C and the B virus. Do you have the impression that in the end these recommendations led to an increased diagnosis of the respective infections or was it just a recommendation that was not followed? Because coming back to our experience here in Germany we had in 2021, there was... As part of the general health checkup, a screening was recommended. And since then, the diagnostic rate really increased in this country, which to me was a big surprise. Did you feel that these recommendations in the end made a difference?

Debika Bhattacharya, MD, MS:

That's a really interesting question. I really think it's about the implementation, right, and where you are and how those guidelines are being followed. I think if you are in a setting where there is not an automatic way to do this, like with an electronic health record-based system, I think that relying on somebody to remember to do universal screening for hep C or hep B is going to fail. I think in those health systems where screening becomes part of a flag, a reminder within the electronic health record to do, then I do think screening increases. We saw that in our own large integrated health system. Once these reminders were put in place, screening rates, which actually I'll say were pretty high already, went up by anywhere from five to 10%.

We did a survey actually of primary care providers and their knowledge of hepatitis C screening practices. And again, I work in a large integrated healthcare setting. And there, we had a lot of primary care providers out of a sample of 100, about 60%, 60, knew about universal hepatitis C screening. But if you ask them what are the barriers? The most important barrier interestingly was just their self-reported forgetfulness to screen in 60% of individuals. Of those individuals, what they really preferred to have was to have some type of HCV digital dashboard or automatic screening. Anything that took that burden of remembering off, which I completely... Look, I can... That's what we use order sets for to remember to do, "Oh, I have to do an HIV viral load. I have to do a CD4. I have to do X, Y, and Z."

I think those can become very useful, and so I think it's in the implementation. So, that was a long answer to your short question. I do think for hepatitis C, there has certainly been an uptake. In hepatitis B, we are also seeing an uptake in screening. I don't think it has been in place long enough to have data to answer that question, but I can tell you anecdotally, especially with the recommendation to use the hepatitis B triple screen, the amount of consults that we are getting, the amount of just curbside questions that we are getting now about, "Oh, I have somebody who's core antibody-positive. What does that mean again?" in the setting of hepatitis B, has increased substantially.

Faye Jackson:

Before we continue, let's get our audience involved again. Mr. R is a 47-year-old man living in Madrid. He is diagnosed with chronic hepatitis B after routine blood work. He has had a positive hepatitis B surface antigen for more than 6 months. His hepatitis B E antigen is negative. HBV DNA is 2000 international units per milliliter. His ALT is within normal range, and there is no evidence of fibrosis on non-invasive assessment. He has no family history of hepatocellular carcinoma. He feels well and asks if he needs treatment now or just regular follow-up. According to current Spanish and European hepatitis B guidelines, what is the most appropriate next step for this patient?

Is it A, start antiviral therapy immediately for all patients with positive hepatitis B surface antigen? B, monitor ALT and HBV DNA levels every 6 to 12 months and reassess for treatment if these rise or fibrosis develops? C, stop follow up since the patient is asymptomatic and liver tests are normal? D, begin nutritional supplements for liver detoxification. Or select E if you are not sure. Go ahead and register your answer now.

The correct answer according to Spanish and EASL guidelines is to recommend regular monitoring rather than immediate therapy for inactive HBV carriers. And now, let's return to our faculty discussion.

Maria Buti, MD, PhD:

The majority of our patients in Spain are chronic hepatitis B E antigen-negative patients. Sometimes the interpretation of the guidelines, particularly in those that are patients with infection but without disease, that is called chronic carriers or chronic hepatitis B infection, are difficult to diagnose and to classify in an initial visit. These patients need a follow-up. I think now the new EASL guidelines, a simplified diagnosis establish easy criteria for non-invasive test for fibrosis that allows to treat more patients. But still the terminology, it's a bit complex. That means that usually only people working on liver disease, specialist are treating these patients, making the access to diagnosis and treatment more difficult at the community level. And finally, for hepatitis delta, Europe has specific guidelines for hepatitis delta that I think are important. I was part of the committee of both of the previous EASL guidelines on hepatitis B and the EASL guidelines on hepatitis delta.

And what I think is good for the EASL guidelines on hepatitis delta is the introduction of the reflex testing for screening for patients with hepatitis delta. What does it means that there is a recommendation that all people HBs antigen positive should be screening for hepatitis delta by anti-delta antibodies? If these antibodies are positive, then tested for viremia, for HBV RNA.

Also, I think this is a difference between your country, U.S. and Europe, is that currently in Europe we have approved a specific treatment for hepatitis delta that it's an entry inhibitor of the virus. We are treated our patients with hepatitis delta with this drug that is called bulevirtide, that we have preliminary data not only on biological efficacy, we have preliminary data suggesting that it's a clear improvement in outcomes. So, less fibrosis progression, less cirrhosis, and less decompensation.

Faye Jackson:

Thank you to our international faculty for a very informative program today. Thank you to our worldwide audience for participating. Before we wrap up, here are three SMART goals related to our discussions. SMART stands for specific, measurable, achievable, relevant, and time-bound. Smart goal one, over the next 6 months, increase HBV, HCV, and HDV screening based on guideline recommendations for your region. SMART goal two,

use guideline concordant approaches to engage and coordinate with interprofessional team members to increase screening for viral hepatitis per published practice guidelines. And SMART goal three, facilitate the care continuum for viral hepatitis by identifying strategies that link diagnosis to appropriate guideline-recommended treatment. Thank you again and have a wonderful day.

