Expert Interviews

National HIV Curriculum Podcast

Should People with HIV Take Aspirin for CVD Prevention?

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HIV exacerbates the risk for adverse cardiovascular events. Dr. Chris Longenecker, a University of Washington Associate Professor of Medicine, and National HIV Curriculum Podcast Lead Editor Dr. Brian Wood discuss the pros and cons around aspirin for primary prevention and how to counsel patients.

Topics:

- CVD and HIV
- aspirin
- CVD Prevention

Chris Longenecker, MD
Director, Global Cardiovascular Health Program
Associate Professor of Medicine
School of Medicine and Dept. of Global Health
University of Washington

Disclosures

Disclosures for Chris Longenecker, MD
Advisory Board Member: Theratechnologies

Brian R. Wood, MD
Professor of Medicine
Division of Allergy & Infectious Diseases
University of Washington

Disclosures
Disclosures for Brian R. Wood, MD
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Transcript

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introduction**[00:00] Introduction**

Hello everyone. I'm Dr. Brian Wood from the University of Washington in Seattle. Welcome to The National HIV Curriculum podcast. This podcast is intended for health care professionals who are interested in learning more about the diagnosis, management, and prevention of HIV.

Starting with some background. As we've discussed in other episodes, individuals with HIV, even those with suppressed HIV on antiretroviral therapy, have higher risk of major adverse cardiovascular events as compared to individuals without HIV. So, prevention of cardiovascular disease should be a priority in HIV clinical practice, and there has been controversy over use of aspirin for primary prevention of cardiovascular events and significant pros and cons to consider.

And we're lucky to have Dr. Chris Longenecker back with us today to help discuss this topic and discuss the pros and cons around aspirin for primary prevention. He probably does not need any introduction at this point, but for listeners, I will just remind you Dr. Longenecker is associate professor of medicine here at the Division of Cardiology and the Department of Global Health at University of Washington. He's inaugural director of University of Washington's Global Cardiovascular Health Program, as well as director of the HIV cardiology clinic at our local Ryan White-funded HIV primary care clinic. He's a renowned researcher on mechanisms and prevention of cardiovascular disease for people with HIV. Chris, we're lucky to have you back with us. Welcome.

Dr. Longenecker

Thanks, Brian. Thanks for the invitation.

Dr. Wood

You're welcome. I learned so much from you, and I'm looking forward to this.

terminology**[01:30] Terminology**

Dr. Wood

So, the focus today will be aspirin for primary prevention, and maybe we can start just as a real basic foundation, how do you think of primary prevention versus secondary prevention? What do those terms mean to you?

Dr. Longenecker

So, primary prevention is trying to prevent a first heart attack or stroke, whereas secondary prevention is what we do after a heart attack or stroke to prevent a subsequent event. So, for secondary prevention and aspirin in particular, there's really a wealth of literature, many, many studies showing the benefit outweighs the risk, and that is because the cardiovascular event rate is high for people who've already had a heart attack or stroke, they're at high risk for a subsequent one. So it's really not controversial. So we're not talking today about aspirin for secondary prevention because it's not controversial. What's more difficult is really trying to weigh those risks and benefits for primary prevention and whether aspirin has a net benefit for the primary prevention of myocardial infarction (MI) and stroke.

Dr. Wood

Thank you, Chris, for clarifying those two different ideas, primary versus secondary prevention.

primary-prevention-controversy**[02:46] Primary Prevention Controversy**

Dr. Wood

So, let's dive into the controversy around primary prevention. Let's just talk first about aspirin for primary prevention in general before focusing in on primary prevention for individuals with HIV. For the general population, it seems like the pendulum has swung a bit, at least during my career, from we really should be doing this to, well, maybe we should be pausing and stepping back and thinking more about pros and cons. What do you think? How does this weigh for you in your mind as primary prevention for the general population?

Dr. Longenecker

So, let's just go back and remind ourselves how aspirin works. The way this is working to prevent atherothrombotic events is by an anti-platelet effect, right? And, so, the benefit of aspirin is reducing clots in atherothrombotic events, but that comes at a risk of increasing bleeding events. So the relative risk and benefit then depends on the absolute risk of atherothrombotic events versus the absolute risk of bleeding. And, there have been really interesting temporal trends in the risk of atherothrombotic events, particularly myocardial infarction and stroke are much less common these days than they were back in the 1960s, 70s and 80s. So that may explain why some of the research has changed in this. I wouldn't say that there's necessarily been a lot of pendulum swings back and forth. It's really more that it just started in the 1980s with some initial recommendations. USPSTF (or the United States Preventative Services Task Force) initially recommended aspirin for men only in middle age and older. And then slowly it expanded their recommendations to include women, to acknowledge that there seemed to be a reduction in colon cancer risk as well. And so I think really, in the 2000 to 2015 or so, it was more in favor to use aspirin for primary prevention.

But then, in 2018, there were some trials that came out looking at some higher-risk populations, but higher risk not only for atherothrombotic events but also for bleeding events. In particular, we think of elderly populations being very high risk for bleeding and interestingly showed maybe not so much of a beneficial effect and significant increased risk of bleeding. And so that's when the pendulum started swinging back. And I think it really has swung back considerably, such that in 2022 when USPSTF updated their guidelines, they really recommended individualized approach for initiating aspirin for primary prevention for people in middle age, 40 to 59, with an elevated 10-year cardiovascular risk greater than 10%, and an acknowledgement that there'd be a discussion about willingness to take it for a longer period of time to have that colon cancer benefit for example. And at the same time, they made a recommendation *against*initiation of aspirin for anyone over 60 years of age. So I think that's the context in which we live now in 2024. I think primary care docs have really gotten away from prescribing aspirin for older patients in general. It's much more individualized discussion.

Dr. Wood

Thanks, Chris. Helps to have a better grasp of that history and context.

hiv-considerations**[06:27] HIV Considerations**

Dr. Wood

So then let me ask, when you are seeing an individual with HIV in your clinic, how does that change the context and the considerations for you?

Dr. Longenecker

HIV itself is a risk factor for atherothrombotic events. And so I think that we have to really acknowledge that

in all of the epi studies that we've seen, it seems to be that that risk is persistent, that's 50% or more potentially—even for women, might be even more—increased risk of myocardial infarction, atherothrombotic stroke, et cetera. And so I think that tips us more in favor of recommending aspirin for primary prevention, but it's not the only thing. So, I think there are many other considerations, but that definitely tips us more in favor of recommending aspirin.

Dr. Wood

So, following that thread, then, are there certain individuals with HIV who you feel should be high priority for taking aspirin for primary prevention, or maybe I should say higher priority?

Dr. Longenecker

I think higher priority. First of all, I just want to be very clear here. I think that this discussion is at the kind of mid-level of the priority list. I've made this point before, but I mean, we have REPRIEVE now. Statins should be the number one consideration. We shouldn't be worrying about aspirin for primary prevention if someone isn't on a statin or if we haven't had vigorous discussion with our patients about the risks and benefits of statins. Some patients may end up not to take a statin for some reason, and that's their choice, and that comes after good doctor-patient discussion. But aspirin is certainly not above that discussion. It's not even above blood pressure management, right. You got to make sure their blood pressure is controlled, that you've had the smoking conversation if they're still smoking, and other lifestyle changes, right? So, only then, after all of those things are optimized, are we really thinking about aspirin for primary prevention. So it's kind of a select group of people and you're adding another pill, so it's just one more pill. A lot of people these days are trying to reduce their pill burden. And so I think a lot of my more recent conversations have ended with patients choosing not to take an aspirin.

But there are some patients, so we've talked in another podcast about abacavir. So, I do think that the mechanism of increased cardiovascular risk for patients on abacavir may be through a platelet reactivity issue. And so, by blunting that with aspirin, I think you may have reduced that risk of increased cardiovascular events on abacavir, but we see very few patients on abacavir these days, so that's relatively minor consideration.

Dr. Wood

It's helpful to hear where you put aspirin on the ladder of primary prevention priorities, and there are a lot for clinicians to think about in practice. And what I'm hearing you say is, really, you're going to focus on this discussion of aspirin for primary prevention *after* you've had those conversations about statins and smoking cessation and lifestyle changes and really worked towards optimizing those things. I find that helpful as a clinician for me to hear where you put it on the priority list.

Dr. Longenecker

And I do want to make sure, just because the messaging around this is so important, this is *not* secondary prevention. If you've had a heart attack or stroke, you need to be on an aspirin, and we will make sure that you are as the cardiologist. Some people really got the wrong message when some of this hit the headlines in the New York Times or whatnot: Aspirin is no longer recommended. And so we can't have our patients who have stents, who have had multiple MIs, they cannot be stopping their statin. So just making sure that the primary care doctors out there also are making sure to be consistent with that messaging.

Dr. Wood

Absolutely. Thank you for underscoring that. Such an important point.

abacavir**[10:30] Abacavir**

Dr. Wood

So, Chris, turning back just for a moment on the abacavir topic. You mentioned on another episode that you believe abacavir, especially current use, may increase platelet reactivity, and thereby risk of ischemic cardiovascular disease. And to the point you've made, we don't prescribe as much abacavir anymore for that and other reasons, but if someone really had a strong reason to take it, was taking abacavir, sounds like there are some data to show that aspirin may be useful for the individuals who are still taking abacavir and have other cardiovascular risk factors. Is that correct?

Dr. Longenecker

Yeah, and I think it's very reasonable to prescribe it for that reason. Unless someone is a very high bleeding risk, I think we have to consider that even in those cases, it may not be beneficial to prescribe aspirin for primary prevention.

Dr. Wood

That makes sense.

counseling**[11:25] Counseling**

Dr. Wood

So, stepping back again, how does the counseling around the pros and cons of aspirin use go for you? What does that look like for you when you do have this conversation with a patient?

Dr. Longenecker

This relates also to how I talk about statins with patients. So I think there's a lot of establishing of rapport and getting to know somebody and also getting to know their ability to kind of understand risk, to understand and weigh risks, to understand probability. What does it mean to have a 10-year ASCVD (arteriosclerotic cardiovascular disease) risk score of 15%? A lot of people, it's just not helpful to try to have a detailed discussion of that. But for other people, it's very, very helpful. And to put bleeding risk versus their ASCVD risk score and then try to understand what they're more fearful of.

So, if people really are fearful of having a heart attack or stroke and they're less concerned about bleeding for whatever reason, just based on their own experiences, their experiences with family members, then they may opt more towards wanting to take that baby aspirin every day. Whereas, if other people really want to reduce their pill burden and are scared about bleeding and having a GI bleed or an intracranial bleed, then they may opt against aspirin. So, it's all about patient preferences. There are tools out there to help people conceptualize risk, but at the end of the day, it's a conversation you have and depends a lot.

Dr. Wood

I appreciate that. That's a great way to consider the balance and how we individualize these decisions and help individuals choose what's best for them. So again, I find this very, very helpful.

key-take-homes**[13:04] Key Take-Homes**

Dr. Wood

Before we wrap up, what would you say is the biggest take-home messages for HIV practitioners or any provider who's caring for people with HIV in terms of aspirin for primary prevention?

Dr. Longenecker

So yeah, that's the first thing—distinguishing primary versus secondary prevention. But if it's a primary prevention situation, I would typically not consider initiating aspirin in people who are over 60 years old in line with USPSTF guidelines. There may be some individual cases where someone really wants to, where it may be reasonable. And then finally, just making it all about patient centeredness and patient preferences and centering that, and I think you'll make the right decision at the end.

Dr. Wood

Absolutely. Chris, thank you for joining us. Again, thank you for this really superb discussion, very clinically relevant and pertinent to our practice.

Dr. Longenecker

You're very welcome. It's always a pleasure to be here. Thanks, Brian.

credits**[14:04] Credits**

Transcripts and references for this podcast can be found on our website, the National HIV Curriculum at www.hiv.uw.edu. The production of this National HIV Curriculum podcast was supported by Grant U10HA32104 from the Health Resources and Services Administration of the U.S. Department of Health and Human Services. Its contents are solely the responsibility of the University of Washington IDEA program and do not necessarily represent the official views of HRSA or