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The unique aspects of chronic hepatitis B infection in Aboriginal and Torres Strait Islander people

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Figure 1 Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM)

Hepatocellular Carcinoma Surveillance Recommendations [8].

Hepatocellular carcinoma (HCC) surveillance (6 monthly ultrasound and AFP) is recommended in these HBsAg + groups:

- Aboriginal and Torres Strait Islander people >50 years
- Africans >20 years
- Asian men >40 years
- Asian women >50 years
- Patients with cirrhosis
- HCC family history

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We commend Mohsen and Levy for the recent publication of their excellent review, “Hepatitis A to E: what’s new?” [1] in the Internal Medicine Journal. We acknowledge the breadth of this topic and that not everything could be covered in the space allocated. We would like to complement their article by highlighting the disproportionate burden of chronic hepatitis B (CHB) that is borne by Aboriginal and Torres Strait Islander Australians (from herein respectfully referred to as Indigenous Australians).

Indigenous Australians make up 2.5% of the national population but comprise 9.3% of those with CHB [2]. Their risk of hepatocellular carcinoma (HCC) is 6 times that of the non-Indigenous population [3] and contemporary estimates of HBsAg positivity for Indigenous Australians in the Northern Territory (NT) are 6.08% [4]. Uniquely, all Indigenous Australians living with CHB in the NT whose virus has been molecularly examined have been shown to have the otherwise uncommon sub-genotype C4 [5]. HBV/C4 has genotypic markers that are associated with rapid progression to cirrhosis and HCC [6] and also a different serotype (*ayw3*) to the vaccine genotype A2 (*adw2*) used in Australia. The implications of these genotypic markers of virulence and serotype mismatch with the vaccine (eg, potentially reduced efficacy) require further study.

Based on this demonstrated high risk of HCC [3], in collaboration with the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) and the Central Australian Rural Practitioners Association (CARPA) [7], we have adapted the HCC screening table from the American Association for the Study of Liver Disease guidelines that was presented in Mohsen and Levy’s review to include Indigenous Australians over the age of 50 (**Figure 1**). In the Australian context, this is an important addition and is freely available on ASHM’s website [8].

We concur with Mohsen and Levy regarding the confusing terminology used to describe the different phases of CHB and we found that the simplified terms proposed in their Table 2 provided some clarity. We note though that qualitative work done in a remote northern Australian Indigenous setting has raised concerns about the use of the word “silent” (phase 1 in Table 2) to describe the early phases of hepatitis B as it is commonly misinterpreted to mean that the condition resulted from sorcery [9]. In an effort to achieve a shared understanding with our Indigenous Australian patients, we have started to refer to the phases simply as “one”, “two”, “three” and “four”, which we support through the use of a bilingual app [10]. This aligns with research showing that a shared understanding between patient and care provider is a pre-requisite to sustainable and quality engagement in care [9].

The hepatitis B virus was first identified from the blood of an Indigenous Australian [11], and liver disease is the third most important contributor to the gap in life expectancy still being experienced by Indigenous Australians [12]. Broad recognition of the higher burden and higher risks of CHB in this setting is an important first step to improving this situation.

Word count 500

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