Editorial Commentary

Hepatitis B down under: consensus recommendations from the Gastroenterological Society of Australia

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Chronic hepatitis B (CHB) represents a global public burden with an estimated 296 million people infected worldwide (1). It is a leading cause of morbidity and mortality related to chronic liver disease and hepatocellular carcinoma (HCC) (2-5). The prevalence of CHB can range from populations with low prevalence (<2%), to populations with high prevalence (>8%). Current recommendations for screening use a prevalence of over 2% as the cutoff to start screening a population (2-5). Australia has a diverse population in which the prevalence of CHB differs between certain subgroups (6,7).

The prevalence of CHB in Australia is estimated to be 0.9% for the whole population; however, the prevalence of CHB in the indigenous Australian population, also described as the Aboriginal and Torres Strait islander population, is 7.2% representing 3.2% of the overall Australian population (6,7). Furthermore, 46.3% of the roughly 222,599 people believed to have CHB in Australia are immigrants from the Asia-Pacific region, where the prevalence of CHB is considered intermediate (between 2–8%) or high (>8%) (5). This variable distribution of disease within the Australian population is further complicated by the identification of disparities in care for patients living with CHB (5,6). Approximately, 27% of patients with CHB are still undiagnosed and only about half of patients that require care and treatment are being appropriately treated according to goals set forth by the National hepatitis B strategy in Australia (5,6). Additional challenges in management of CHB in Australia are the that some CHB patients live in remote areas and may have limited access to specialist care (5,6). Given this heterogeneous CHB population within the Australian population, management of CHB requires a nuanced approach to increased screening, linkage to care of patients and expanding the role of primary care physicians in management of CHB. The previous guideline for CHB by the Gastroenterological society of Australia (GESA) was published in 2009 (8). GESA recently published an update to their previous guideline with a summary published in the *Medical Journal of Australia* (5,9).

Practice guidelines are evidenced based recommendations on disease management usually developed by learned societies (10). These recommendations subsequently become a common standard to improve patient outcomes but also have other potential benefits including: reducing healthcare costs by making recommendations that are the most cost-effective, increasing healthcare utilization by calling attention to underrepresented populations with a disease, improving quality of care by improving physician confidence in practice, and providing guidance for public policy in addition to others (10). Nevertheless, guidelines can have significant pitfalls. Many guidelines contain information that is best understood by specific specialties and can be difficult to follow by other healthcare professionals (10). Guidelines are usually management strategies for a large patient population that may not always

be applicable to individual patients or subgroups within the general population and this is particularly important for CHB (10). Additionally, many clinical scenarios have minimal evidence to recommend a specific management strategy and a society guideline can weigh in with authority and expert opinion to help guide clinical decision making in these controversial situations. Importantly, this should be minimized as much as possible so as to let evidence be the primary driver of the guideline (10). For the latest GESA guideline, the original iteration contained 75 recommendations but were narrowed down to the published 32 and only 9 of the 32 recommendations were categorized as having low evidence and 1 recommendation was listed as weak (5,9). This demonstrates the authors' commitment to their own reported goal of creating a lasting document that uses evidence as the primary driver to make recommendations (5,9).

Unlike many subspecialty guidelines, this guideline was developed to guide all healthcare professionals who manage CHB in Australia as there are many locations in Australia where specialty care is not available (5,6,9). While the management of CHB can be difficult due to its complex multiphasic natural history and the impetus for treatment can be variable, the overall management strategy has become standardized across multiple international societies and GESA follows these same general principles (2-5,9). This allows for recommendations that are concise with good evidence and are generally easy to follow but there are a few areas where the recommendations can differ.

The Australian indigenous population has the highest prevalence of any other subgroup in Australia (6,9). And yet significant disparities in healthcare access and medical care have been demonstrated to the many culturally and linguistically diverse (CALD) communities that make up the indigenous population and it has led to mistrust of the Australian healthcare system (11). Indeed, there are 167 different languages spoken by those who identify as aboriginal and Torres strait islander people and having a cultural and language appropriate discussion is essential to providing care to the CALD communities (7). This guideline is the first, for CHB, to make a recommendation to specifically account for this fact and recommend a culturally sensitive approach to providing care (R2) (5,9).

There is still some debate on when to treat patients who have hepatitis B e-antigen positive ($HBeAg^+$) chronic infection. All guidelines agree that the majority of these patients do not require treatment but differ on when treatment should be initiated in this group (2-5,9). GESA takes the position based on newer research that suggest risk factors such as age >35 years, increased risk of HCC development, Coinfection with other viruses, concurrent liver disease, extrahepatic manifestations, or prevention of transmission can be used to consider treatment whereas most other guidelines usually recommend liver biopsy in this group, based on age, to guide who to treat (2-5,9).

Management of patients with CHB or prior exposure to hepatitis B virus (HBV) who are starting immunosuppressive therapy is still evolving. There has been a push to categorize the risk posed by different immunosuppressive agents so that initiation of therapy can be more targeted only to those who need it. GESA guidelines conveniently tabulate the most commonly used drugs and categorize them based on risk of HBV reactivation (HBVr) (5). The recommendations differentiate the need to start antiviral prophylaxis in patients who have CHB or prior exposure to CHB when receiving high-risk immunosuppression and recommend monitoring when receiving low-risk immunosuppression (3,5,12). This mirrors the latest recommendations from the Asian Pacific Association for the Study of Liver disease (APASL) that were published separately from overall management of CHB in 2021 due to the growing relevance of immunosuppressive therapy in fields beyond oncology (12).

Addressing controversies can be an essential part of guidelines and the authors' do take a stance in some issues to help provide reasonable guidance. One of the more recent controversies is data from Asia showing that the use of tenofovir may lead to decreased incidence of HCC as compared to entecavir (5,9). That said, a meta-analysis of all available data appeared to show no difference and the authors' make note of this specific fact to not differentiate between these two therapies (5,9). Additionally, there are topics that were not addressed in this guideline to again keep the recommendations clear and easy to follow. The role of specific biomarkers, such as HBsAg titers and others, is still changing. For example, evidence suggests that titers of HBsAg can be used to guide when to stop viral suppression therapy and can even be used to guide how to monitor patients off therapy (2,3,13). The GESA guideline does not go into detail about the use of these biomarkers because evidence is still accumulating to determine their use and there is currently no international standard for these biomarkers though the most recent Japanese guidelines offer some guidance on where HBsAg titers and other biomarkers may fit into management (13).

In conclusion, the recent guideline by GESA provides useful guidance for all healthcare professionals involved in management of CHB with easy to follow recommendations that generally similar in agreement with other worldwide guidelines but also address some unique circumstances to Australia. The level of evidence for most recommendations is moderate to high and all but one of the recommendations are listed as strong. Overall, this was a timely update to previous Australians guidelines should help improve management of CHB in Australia.

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Footnote

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References

1. World Health Organization. Hepatitis B factsheet. Available online: https://www.who.int/news-room/fact-sheets/detail/hepatitis-b
2. Terault NA, Lok AS, McMahon BJ, et al. Update on prevention, diag-nosis, and treatment of chronic hepatitis B: AASLD 2018 hepatitis B guid-ance. Hepatology 2018;67:1560-99.
3. European Association for the Study of the Liver. EASL 2017 Clinical Practice Guidelines on the management of hepatitis B virus infection. J Hepatol 2017;67:370-98.
4. Sarin SK, Kumar M, Lau GK, et al. Asian-Pacific clinical practice guidelines on the management of hepatitis B: a 2015 update. Hepatol Int 2016;10:1-98.
5. Hepatitis B Consensus Statement Working Group. Australian consensus recommendations for the management of hepatitis B infection. Melbourne: Gastroenterological Society of Australia; 2022.
6. Australasian Society for HIV, Viral Hepatitis, and Sexual Health Medicine (ASHM). Viral Hepatitis Mapping Project. Available online: https://ashm.org.au/wp-content/uploads/2022/04/ASHM_ViralHepReport_2020_WEB_final.pdf
7. Australian Bureau of Statistics. Census by topic. Available online: https://www.abs.gov.au/census/find-census-data/census-data-topic
8. The Gastroenterological Society of Australia. Australian and New Zealand Chronic Hepatitis B (CHB) Recommendations. 2nd ed., 2009. Available online: http://www.gesa.org.au/files/editor_upload/File/Professional/CHB.pdf
9. Lubel JS, Strasser SI, Thompson AJ et al. Australian consensus recommendations for the management of hepatitis B. Med J Aust 2022;216:478-86.
10. Woolf SH, Grol R, Hutchinson A et al. Potential benefits, limitations, and harms of clinical guidelines. BMJ 1999;318:527-30.
11. Clark PJ, Stuart KA, Leggett BA, et al. Remoteness, race and social disadvantage: disparities in hepatocellular carcinoma incidence and survival in Queensland, Australia. Liver Int 2015;35:2584-94.
12. Lau G, Yu ML, Wong G, et al. APASL clinical practice

guideline on hepatitis B reactivation related to the use of immunosuppressive therapy. Hepatol Int 2021;15:1031-48.
13. Drafting Committee for Hepatitis Management Guidelines, the Japan Society of Hepatology. Japan society of hepatology guidelines for the management of hepatitis b virus infection: 2019 update. Hepatol Res 2020;50:892-923.

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