Age of hepatitis B e antigen loss in Aboriginal, Torres Strait Islander and non-Indigenous residents of tropical Australia; implications for clinical care

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There is a stark difference in the incidence of hepatocellular carcinoma (HCC) between Aboriginal and Torres Strait Islander individuals living with chronic hepatitis B (CHB) in Far North Queensland (FNQ), a finding that has been hypothesised to relate to differences in hepatitis B virus genotype.

We identified every FNQ resident with CHB, determined their country of birth, their HBeAg status, the age they lost HBeAg and whether they identified as an Aboriginal, a Torres Strait Islander or as a non-Indigenous individual.

Aboriginal individuals were less likely to be HBeAg positive than Torres Strait Islander and non-Indigenous individuals (p<0.0001).



Individuals living in FNQ with CHB, stratified by Aboriginal and Torres Strait Islander status and their most recent HBeAg status Aboriginal individuals lost HBeAg at an earlier age (median (interquartile range): 30 (23-39)) than Torres Strait Islander (38 (29-49)) and non-Indigenous (36 (29-47)) individuals, p<0.0001.



Kaplan Meier curve demonstrating the HBeAg loss over time, stratified by Aboriginal, Non-Indigenous and Torres Strait Islander status.

This provides a biological basis for the observation that Aboriginal individuals with CHB in FNQ are at a lower risk of HCC and data to support the principle of genotype-based care in the region.

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