

Risk of hepatitis B virus (HBV) infection or reactivation in people living with HIV (PLWH) who attend Gold Coast Sexual Health Service (GCSHS) and are on 2-drug non-HBV covering antiretroviral treatment (2DR)

Authors:

JANE MACLEOD¹

¹ *Gold Coast Sexual Health Service, Gold Coast Health, Gold Coast, Australia*

Background:

2-drug regimens (2DR) are increasingly prescribed for the management of HIV infection. Unlike 3-drug regimes (3DR), 2DR lack incidental activity against hepatitis B (HBV). This creates a risk of HBV infection or reactivation in susceptible people, who initiate or switch to 2DR, or discontinue antiretroviral therapy (ARV).

Current guidelines recommend the following HBV risk mitigation strategies when initiating or switching to 2DR:

- Routine HBV screening prior to 2DR,
- HBV vaccination or booster in those susceptible to HBV,
- Ongoing monitoring if risk of HBV (HBsAb <10mIU/mL or HBcAb positivity) with alanine aminotransferase (ALT) monitoring; and HBV testing in ALT elevation,
- Initiation of HBV-active ARV if HBV is detected.

Methods:

The study involved-

- Systematic review of literature to identify evidence-based and consensus recommendations for HBV risk mitigation in 2DR initiation or switch; and any gaps in current literature,
- Clinical audit of PLWH attending GCSHS to determine the proportion of PLWH on 2DR who are susceptible to HBV infection or reactivation, and to evaluate current HBV risk mitigation processes at GCSHS.

Results:

174 medical records of PLWH prescribed 2DR were audited.

Outcomes included HBV status, HBV vaccination, evidence of HBV immunity, HBV core antibody positivity, frequency of ALT monitoring and HBV testing in susceptible patients, and detection of incident or reactivated HBV infection.

Conclusion:

The research is important as evidence-based processes are essential to mitigate the risk of HBV infection or reactivation in PLWH using 2DR.

The research will-

- Identify current guidelines, evidence, and consensus recommendations related to HBV risk mitigation in PLWH on 2DR; and gaps in literature,
- Evaluate existing HBV risk mitigation processes at GCSHS for PLWH on 2DR,
- Strengthen GCSHS processes for 2DR initiation or switch, and ongoing monitoring for HBV-susceptible people,
- Inform quality improvement of 2DR initiation and switch, and monitoring of HBV-susceptible people.

Disclosure of Interest Statement:

No competing interests.