

Title: Hepatitis B in transplant recipients: An Australian Single Centre Study of Screening, Vaccination, and Management

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ABSTRACT

Introduction

There are limited existing data regarding the quality of Hepatitis B (HepB) screening, or management among transplant recipients who are at increased risk of donor-derived HepB infection.

Aim

This study examined (i) the rate of appropriate HepB screening prior to transplant, (ii) rate of completion of HepB course for those who required vaccination, and (iii) the management of transplant recipients at risk of HepB-related adverse outcomes in our cohort including rate of HepB flare or reactivation.

Methods

We performed a retrospective analysis of 400 transplant recipients (200 solid organ and haematopoietic stem cell transplant recipients) from January 2020 to December 2021 at Alfred Health, Melbourne, Australia. Key information about HepB screening and vaccination were extracted from medical records. Progress notes were examined to assess management of any HepB related adverse events.

Results

Pre-transplant HepB screening rate was 99.25%. Among those with vaccination records, 59.8% completed a HepB vaccination course. We observed variation in duration of nucleoside analogue use as chemoprophylaxis among individuals with resolved HepB, ranging from three months to lifelong. HepB reactivation occurred in one recipient with prior resolved HepB during the study. The prevalence of chronic HepB was 0.75%, with all cases appropriately managed.

Conclusion

Vaccination rates exceeded some international reports but fell short of recommendations. Lack of centralized vaccination records likely adversely impacted vaccination rates. Mechanisms to streamline HepB screening, vaccination and management peri-transplant should be explored to improve outcomes for this vulnerable cohort.