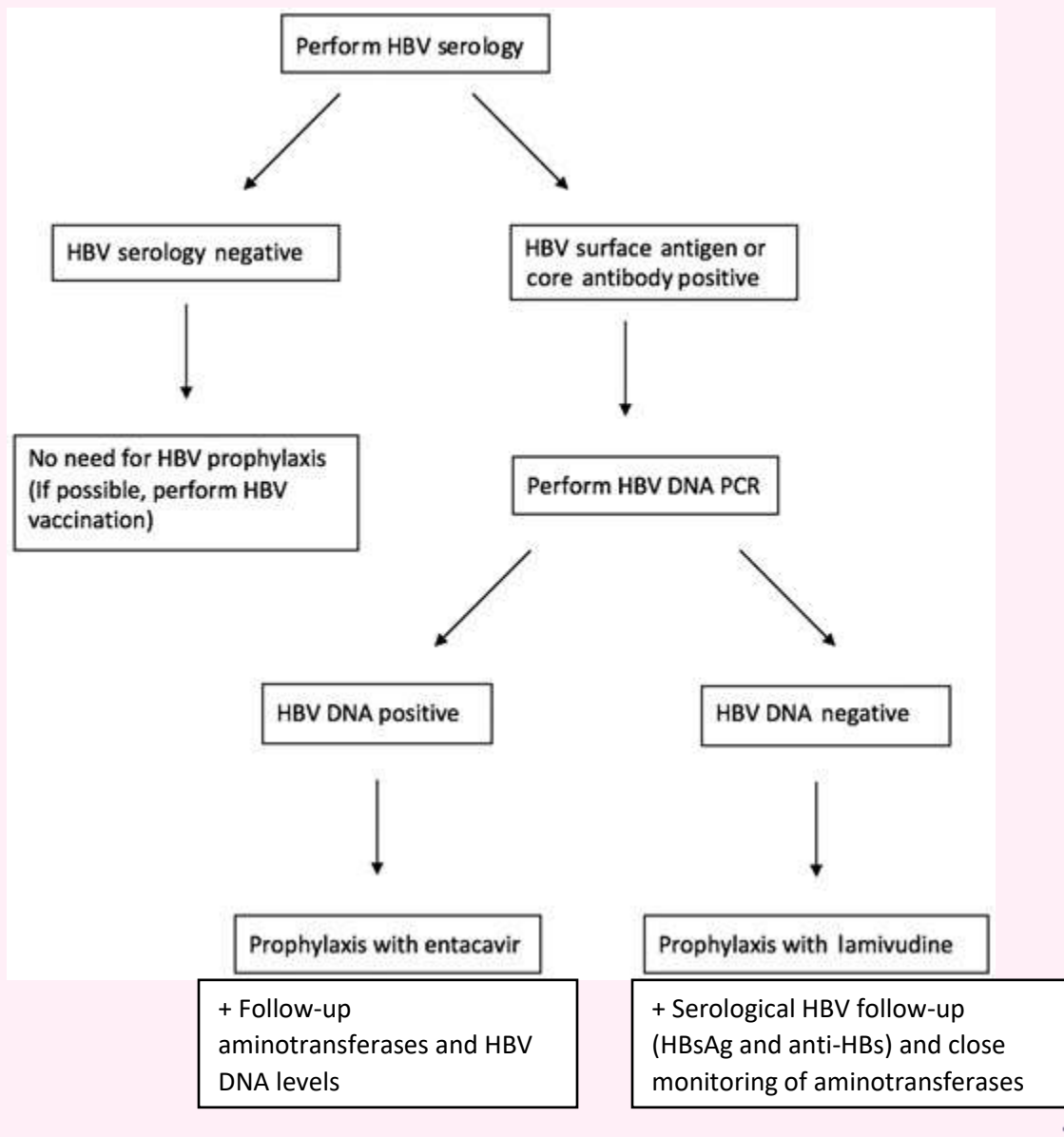


HEPATITIS B VIRUS REACTIVATION

Pre-transplant screening for HBsAg, anti-HBc and anti-HBs.

Prophylaxis⁽¹⁾⁽²⁾

- Patients should have completed a course of HBV vaccination prior to receiving rituximab, though in practice this can be challenging given the time period required for HBV vaccination.
- Vaccination should be considered even after a patient has received rituximab therapy, although it should be delayed by 5–6 months because vaccinations still offer partial protection.



Antiviral doses⁽²⁾⁽³⁾

Drug	Entecavir	Lamivudine
Dose	0.5 mg/ day, 1 week prior to Rituximab and at least 3 weeks post Rituximab	100 mg/day 1 week prior to Rituximab and at least 3 weeks post Rituximab
Dose in renal impairment GFR (ml/min)	30–50ml/min: 250 mcg daily 10–30ml/min: 150 mcg daily <10 ml/min: 50 mcg daily	30–50ml/min: 100 mg stat then 50 mg daily 15–30ml/min: 100 mg stat then 25 mg daily 5–15 ml/min: 35 mg stat then 15 mg daily <5 ml/min: 35 mg stat then 10 mg Daily
Dose in patients undergoing renal replacement therapy	CAPD: 0.3% dialysed. Dose as in GFR<10 mL/min HD 13% dialysed. Dose as in GFR<10 mL/min HD F/High flux: Dialysed. Dose as in GFR<10 mL/min CAV/VVHD: Likely to be dialysed. Dose as in GFR=10–30 mL/min (Renal drug handbook)	CAPD: Not dialysed. Dose as in GFR<5 mL/min HD: Dialysed. Dose as in GFR<5 mL/min HD F/High flux: Dialysed. Dose as in GFR<5 mL/min CAV/ VVHD: Unknown dialysability. Dose as in GFR=5–15 mL/min (Renal drug handbook)

Treatment

In the event of HBV reactivation in patients receiving Rituximab, it is recommended to immediately **discontinue the drug** and start appropriate treatment for HBV.⁽²⁾

- (1) Andrew Nixon, Leanne Ogden, Alexander Woywodt, Ajay Dhaygude, Infectious complications of rituximab therapy in renal disease, Clinical Kidney Journal, Volume 10, Issue 4, August 2017, Pages 455–460
- (2) Meng, Catarina, Carolina Belino, Luciano Pereira, Ana Pinho, Susana Sampaio, Isabel Tavares, Manuela Bustorff, António Sarmento, and Manuel Pestana. 2018. “Reactivation of Hepatitis B Virus in Kidney Transplant Recipients with Previous Clinically Resolved Infection: A Single-Center Experience.” Nefrología (English Edition) 38 (5): 545–50.
- (3) Ashley, Caroline, and Aileen Dunleavy. 2018. The Renal Drug Handbook: The Ultimate Prescribing Guide for Renal Practitioners, 5th Edition. 5th ed. London, England: Routledge.

