Prevention of Hepatitis B reactivation during immunosuppressive or chemotherapy Full Clinical Guideline

Reference no.: CG-T/2023/215

During immunosuppression the Hepatitis B virus (HBV) can escape immune control leading to increased replication. The more intense the immunosuppressive regime, the more likely this is to occur. Immune reconstitution following withdrawal of treatment can provoke a reactivation hepatitis that may be fatal. The majority of cases occur in HBsAg positive patients, but there is also a small risk that anti-HBc positive, HBsAg negative patients harbour occult infection capable of reactivation during immunosuppression.

Guidance applies to patients starting immunosuppressive treatment for autoimmune, atopic diseases, bone marrow or solid organ transplantation and chemotherapy. Screening should include anti-HBc and if positive HBsAg and anti-HBs.

Please refer all patients who are HBsAg positive for urgent assessment in the hepatology clinic for further assessment prior to commencing treatment.

HBsAg positive patients - check HBV DNA level

HBsAg positive and HBV DNA > 2000 IU/ml then offer prophylaxis with Entecavir (ETV) or Tenofovir (TDF or TAF) - start before beginning immunosuppressive Rx and continue for a minimum of 12 months after stopping immunosuppression

If HBsAg positive and HBV DNA < 2000 IU/ml then offer prophylaxis with Tenofovir or Entecavir Continue for a minimum of 6 months (EASL recommend 12 months) after stopping immunosuppression. Consider up to 18 months treatment post Rituximab based chemotherapy

HBsAg negative, anti- HBc positive patients

If starting rituximab or other B cell depleting therapies then start Lamivudine (LAM) and continue for minimum of 6 months post immunosuppression therapy

If not starting rituximab or other B cell depleting therapies then:
If anti-HBs negative measure HBV DNA monthly and start prophylaxis if becomes detectable (LAM if HBV DNA < 2000 IU/ml and < 6 months treatment envisaged, change to TDF or ETV if detectable at 6 months; TDF or ETV if > 2000 IU/ml or expected to last > 6 months. Continue antiviral therapy for a minimum of 6 months after stopping immunosuppressive therapy.
If anti-HBs positive then do not require prophylaxis (unless on Rituximab as above)

Further reading

Hepatitis B (chronic) - NICE clinical guidance 165. June 2013, last updated 2017

EASL 2017 Clinical Practice guidelines on the management of hepatitis B virus infection. J Hepatol (2017)

AASLD 2018 – Update on the Prevention, Diagnosis and Treatment of chronic Hepatitis B

Documentation Controls **(these go at the end of the document but before any appendices)**

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Training and Dissemination: Forms part of liver handbook which is disseminated to all clinicians rotating through Hepatology				
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