Hepatitis B Serologic Testing Before Initiation of Oral Steroids

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Introduction
Hepatitis B virus (HBV) reactivation after immunosuppressive therapy is a well-recognised and potentially fatal clinical problem. Hepatitis serology testing before initiation of steroids is paramount in risk assessment and prevention of HBV reactivation.

Objectives
(1) Clinical audit of Hepatitis B serological testing compliance before oral steroids initiation, within the Department of Ophthalmology (HKWC) (2) Identify high-risk patients and ensure compliance where appropriate (3) Raise awareness of current guidelines and enhance patient safety when prescribing oral steroids

Methodology
Patients who were prescribed oral steroids during the one-year period between 27/09/2016 to 27/09/2017 were identified using CDARS. The data collected using CMS included: type, dosage and duration of steroids, status of Hepatitis B serological testing (HBsAg) and baseline LFT. The standard for this particular investigation is based on the American Gastroenterological Association (AGA) Institute Guideline on the Prevention and Treatment of Hepatitis B Virus Reactivation During Immunosuppressive Drug Therapy.

Result
A total of 64 patients were identified. Twenty-five patients (39%) had oral steroids for < one week (low-risk, regardless of their HbsAg status). Three patients (4.7%) had steroid dose < 10mg, but for > 4 weeks in duration (potentially low or moderate-risk). In this group, 1 had HbsAg testing before starting steroids. Twenty-five patients (39%) had oral steroids of ≥ 10mg and duration of ≥ 4 weeks (potentially moderate or high-risk). Nineteen patients had HbsAg testing in this group before starting steroids. Overall, for patients who were not in the definite low-risk group, the compliance of
HbsAg testing before initiation of oral steroids was 69% (27 of 39). None of the patients in this audit developed Hepatitis B reactivation as a result of oral steroids. Patients who were still on steroids at the time of data analysis have been contacted, to ensure that the HbsAg serology testing compliance rate is up to 100%. Hepatitis B serology testing should be mandatory for all patients who may need oral steroids, in order to allow risk stratification. The results showed that most of our patients had HbsAg testing before initiation of steroids, in keeping with the current recommendation. To ensure even higher compliance rate, automatic crosschecking mechanisms can be considered at the time of steroid prescription on CMS.