

Clinical Kidney Journal, 2019, vol. 12, no. 3, 463

doi: 10.1093/ckj/sfz035 Advance Access Publication Date: 21 April 2019 Letter to the Editor

LETTER TO THE EDITOR

False-positive hepatitis B test results after intravenous immunoglobulin therapy

Anne Wil J. den Hoed-Krijnen and Peter J.H. Smak Gregoor

Department of Internal Medicine, A Schweitzer Hospital, Dordrecht, The Netherlands

Correspondence and offprint requests to: P.J.H. Smak Gregoor; E-mail: p.smakgregoor@asz.nl

A 75-year-old male patient returned to our centre for peritoneal dialysis after transplantectomy due to renal transplant rejection. Routine viral screening prior to resuming dialysis indicated anti-Hepatitis B (anti-HB titre of 363 IU/L [anti-Hepatitis Bcore (anti-HBc) and Hepatitis Be antigen (HBeAg) both negative], which suggested that the patient received hepatitis B vaccination. However, both patient and the referring centre denied vaccination. The patient's anti-HB titres decreased over time (Table 1).

During anti-rejection therapy, the patient received intravenous immunoglobulin (IVIG) therapy. The possibility of passive transfer of hepatitis B antibodies after IVIG administration resulting in false-positive hepatitis B serology and partial passive immunization following IVIG has been described [1–4].

Table 1. Course of anti-HB titres and relevant events

Date	Event	Anti-HB titres (IU/L)
June 2017	Dialysis	<3, 10
October 2018	IVIG therapy	
October 2018	Transplantectomy	
5 November 2018	Blood test	363
29 November 2018	Blood test	195
13 December 2018	Blood test	101

Attention to the possibility of this passive immunization is important, as it can lead to misinterpretation of test results with implications for further treatment. This phenomenon may be more prevalent with the increased use of IVIG in transplant rejection nowadays.

CONFLICT OF INTEREST STATEMENT

None declared.

REFERENCES

- 1. Arnold DM, Crowther MA, Meyer RM *et al*. Misleading hepatitis B test results due to intravenous immunoglobulin administration: implications for a clinical trial of rituximab in immune thrombocytopenia. *Transfusion* 2010; 50: 2577–2581
- 2. Lee S, Kim HW, Kim K-H. Antibodies against Hepatitis A and Hepatitis B virus in intravenous immunoglobulin products. *J Korean Med Sci* 2016; 31: 1937–1942
- Parker S, Gil E, Hewitt P et al. Case report: passive transfer of hepatitis B antibodies from intravenous immunoglobulin. BMC Infect Dis 2014; 14: 99
- 4. Benton E, Iqbal K, Wade P et al. False-positive Hepatitis B serology following IVIG therapy: forgotten but not gone!! J Am Acad Dermatol 2012: e123–124

© The Author(s) 2019. Published by Oxford University Press on behalf of ERA-EDTA.

Received: 19.2.2019; Editorial decision: 11.3.2019

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/ licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact journals.permissions@oup.com