

## Use of entecavir in hepatitis B virus reactivation of a patient with non-Hodgkin's lymphoma

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**Author contributions:** Both authors contributed to this work.

**Conflict-of-interest statement:** The authors declare no conflict of interest related to this manuscript.

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Received: March 2, 2015  
Peer-review started: March 4, 2015  
First decision: April 13, 2015  
Revised: April 21, 2015  
Accepted: June 9, 2015  
Article in press: June 9, 2015  
Published online: September 21, 2015

### Abstract

We read with interest the case report by Liu *et al* and the correspondence by Tuna *et al* regarding this case. Liu *et al* described hepatitis B virus (HBV) reactivation in a patient with non-Hodgkin's lymphoma

after withdrawal of lamivudine prophylaxis. When HBV reactivation was observed three months after lamivudine withdrawal, entecavir 0.5 mg daily was started. HBV DNA level was moderately elevated ( $10^4$  copies/mL) at that time. So, we could not understand why a potent antiviral like entecavir was required for this case. In addition to this, entecavir must be used at a dose of 1 mg in patients with prior prophylactic treatment with lamivudine. As stated by Tuna *et al* duration of lamivudine prophylaxis in this case might be insufficient and HBV reactivation might have occurred for this reason. So, we suppose that resolution of HBV reactivation might also be achieved with lamivudine instead of entecavir in this case.

**Key words:** Immunochemotherapy; Hepatitis B reactivation; Antiviral prophylaxis; Lamivudine; Entecavir

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**Core tip:** Lamivudine is used for the prevention of hepatitis B virus (HBV) reactivation in patients receiving immunochemotherapy. Following cessation of lamivudine prophylaxis, HBV reactivation can be observed because of insufficient duration of prophylaxis. If HBV DNA is moderately elevated at that moment, prophylaxis may be continued with lamivudine instead of entecavir.

Gozdas HT, Arpaci E. Use of entecavir in hepatitis B virus reactivation of a patient with non-Hodgkin's lymphoma. *World J Gastroenterol* 2015; 21(35): 10251-10252 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v21/i35/10251.htm> DOI: <http://dx.doi.org/10.3748/wjg.v21.i35.10251>

### TO THE EDITOR

We read with interest the case report by Liu *et al*<sup>[1]</sup> and the correspondence by Tuna *et al*<sup>[2]</sup> regarding this

case. Liu *et al*<sup>[1]</sup> described HBV reactivation in a patient with non-Hodgkin's lymphoma after withdrawal of lamivudine prophylaxis. We agree with the opinions of Tuna *et al*<sup>[2]</sup> regarding the timing and duration of antiviral prophylaxis against hepatitis B. However, we also have some additional comments on this case.

Lamivudine was used in this case for a total of eight months (during immunochemotherapy that lasted four months and an additional four months following the end of immunochemotherapy). When HBV reactivation was observed three months after lamivudine withdrawal, entecavir 0.5 mg daily was started. HBV DNA level was moderately elevated ( $10^4$  copies/mL) at that moment. So, we could not understand why a potent antiviral like entecavir was required for this case.

In addition to this, entecavir must be used at a dose of 1 mg in patients with prior prophylactic treatment with lamivudine<sup>[3]</sup>. Although entecavir was used at a dose of 0.5 mg in this case, resolution of HBV reactivation was observed. Since the case received

prior lamivudine prophylaxis for only eight months and resolution of HBV reactivation was achieved with entecavir 0.5 mg, lamivudine resistance seems to be very unlikely. As stated by Tuna *et al*<sup>[2]</sup> duration of lamivudine prophylaxis in this case might be insufficient and HBV reactivation might have occurred for this reason. So, we suppose that resolution of HBV reactivation might also be achieved with lamivudine instead of entecavir in this case.

## REFERENCES

- 1 **Liu WP**, Zheng W, Song YQ, Ping LY, Wang GQ, Zhu J. Hepatitis B surface antigen seroconversion after HBV reactivation in non-Hodgkin's lymphoma. *World J Gastroenterol* 2014; **20**: 5165-5170 [PMID: 24803836 DOI: 10.3748/wjg.v20.i17.5165]
- 2 **Tuna N**, Karabay O. Hepatitis B reactivation and timing for prophylaxis. *World J Gastroenterol* 2015; **21**: 2263-2264 [PMID: 25717269 DOI: 10.3748/wjg.v21.i7.2263]
- 3 **Brost S**, Schnitzler P, Stremmel W, Eisenbach C. Entecavir as treatment for reactivation of hepatitis B in immunosuppressed patients. *World J Gastroenterol* 2010; **16**: 5447-5451 [PMID: 21086562 DOI: 10.3748/wjg.v16.i43.5447]

P- Reviewer: Su ZJ S- Editor: Yu J

L- Editor: A E- Editor: Liu XM





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ISSN 1007-9327

