

## Hepatitis B resolution after autologous Bone Marrow Transplantation

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### To the Editor,

Hepatitis B (HBV) reactivation after receiving cytotoxic chemotherapy (CT), immunosuppressive therapy or after bone marrow transplantation (BMT) is a common and serious problem, which can lead to hepatitis, hepatic failure and even death (1,2).

Although HBV has uncertain viral kinetics in immunosuppressive patients, HBsAg loss or seroconversion is not an expected result. Herein, for the first time, we describe HBV resolved patient immediately after autologous BMT.

A 56-year-old man had been diagnosed with multiple myeloma (MM) in June 2013 and was given 8 cycles of vincristin, adriamycin and dexamethasone. After completing CT, his serological test for HBsAg became positive and he was consulted to our department before BMT. Lamivudine (100 mg/day) was initiated and he underwent BMT a month after. We summarized the serological markers of the patient throughout the follow-up in Table 1. Anti HBs antibody became positive and HBsAg became negative just 1 month after BMT while he was taking antiviral therapy. He is still taking lamivudine and planned to stop the treatment after completing 12 months following seroconversion.

HBV reactivation after immunosuppressive therapy was not uncommon, however it is unpredictable. The incidence is seen around 5-54% in HBsAg positive recipients (3). This is reflected by increases in serum levels of HBsAg and HBV DNA (2).

Previously, it was showed that serologic clearance of HBsAg could occur after allogeneic BMT. It may represent an immune attack by the transplanted donor lymphocytes on HBV-bearing hepatocytes via adoptive immunity transfer (4). Nevertheless, such a seroconversion is not usual after autologous BMT. Although the exact mechanism of these flare clearances is uncertain, the new immune response may be stronger than previous ; hence it can cause rapid serologic clearance of HBsAg (5).

### References

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Table 1. — The serological markers of the patient throughout the follow-up

DATE	HBsAg (miu/mL)	HBeAg	Anti HBe	Anti HBs (iu/ml)	Anti HBc Ig M	Anti HBc Ig G	HBV DNA (copy/mL)
June 2013	negative	negative			negative	Positive	
September 2013	11.02	negative					
December 2013	10.77	negative					
January 2014	2,29	negative	+	-	0,85	+	325
April 2014	negative			105			
May 2014	negative	negative	+	164			negative
June 2014	negative			245			
August 2014	negative			237			negative
September 2014	negative			347			

He had been diagnosed with multiple myeloma in June 2013 and was given 8 cycles of vincristin, adriamycin and dexamethasone. CT ended in November 2013. Lamivudine (100 mg/day) was initiated in January and he underwent BMT a month after.

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