Death from acute hepatic failure following withdrawal of adefovir

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ABSTRACT
A 35-year-old man with chronic hepatitis B took adefovir 10 mg/day. Three months later, his liver function returned to normal; fifteen months later, his HBV DNA level was <1×10^3 copies/ml. However, his HBsAg was still positive. After two years of treatment, adefovir was withdrawn by himself. After forty days of adefovir discontinuation, the man developed fatigue and anorexia. Laboratory testing showed the following results: ALT 1884.9 U/L, AST 135.4 U/L, Tbil 42.8 μmol/L, DBil 16.8 μmol/L, HBV DNA 1.27×10^5 copies/ml. Viral rebound due to adefovir withdrawal was suspected. Subsequently he was admitted to hospital and given oral entecavir 1 mg/day and liver-protective and symptomatic therapy. However, the patient’s symptoms became aggravated gradually and deepening jaundice occurred. Laboratory investigations revealed the following values; Tbil 428 μmol/L, PTA 13.8%, INR 5.8. He was diagnosed with hepatic failure. Despite treatment with non-biotype artificial liver and plasmapheresis, his condition deteriorated further, and hepatic encephalopathy occurred. Finally he died of hepatic failure.

KEY WORDS
adefovir; withdrawal response; hepatic failure; adverse reaction
II - III期，患者家属要求出院。出院后3周在当地医院死亡。

讨论　阿德福韦属于核苷酸类似物，与其他核苷酸类似物一样，能抑制HBV DNA多聚酶的活性，并是病毒正在合成的DNA链中，终止病毒DNA链的延长，抑制病毒复制。但是本药只是反转录抑制剂，不能抑制HBV DNA，对共价闭合环状DNA（cccDNA）不能起到抑制作用。而cclDNA是HBV复制的源泉，因此阿德福韦只能抑制病毒的复制，而不能根除病毒。在病毒耐药或没有达到完全抑制后停药，可造成病毒学的反弹，导致疾病复发，甚至发生肝衰竭。本例患者就是因停用阿德福韦后，病毒复制反弹，导致肝功能恶化，急性肝功能衰竭死亡。因此，临床医生在应用阿德福韦抗病毒治疗时，应告知患者不能随意停药，需要长期服用。达到一定疗效后在医生的指导下停药，停药后也需要严密监测。

参考文献

儿童静脉滴注头孢曲松钠出现急性溶血性贫血

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摘要　1例1.5岁男孩首次静脉滴注头孢曲松钠1.0 g治疗上呼吸道感染时出现寒战、发热，而后转入我院。入院时精神萎靡，面色苍白。血常规示；object out 92 g/L，RBC 4.21×10^{12}/L，红细胞平均体积(MCV)68.4 fl，红细胞压积(PCV)0.288，网织红细胞(Ret)0.01。入院第2天再次给予头孢曲松钠1.0 g加入5%葡萄糖注射液100 ml静脉滴注。5 h后，患儿全身皮肤黄染，又2 h后出现酱油色尿，T 39 ℃。实验室检查；object out 45 g/L，RBC 1.83×10^{12}/L，PCV 0.12，Ret 0.03，直接Coombs试验(+)。诊断为急性溶血性贫血，立即停药。患者经静脉注射地塞米松、静脉注射丙种球蛋白及输注红细胞后，上述症状缓解，实验室检查示；RBC 3.60×10^{12}/L，Hb 91 g/L，PCV 0.289，Ret 0.036。

关键词　头孢曲松钠；急性溶血性贫血；不良反应

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Acute hemolytic anemia occurring in a child following intravenous infusion of ceftriaxone sodium

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ABSTRACT A 1.5-year-old boy was hospitalized with chill and fever after an IV infusion of ceftriaxone sodium 1.0 g for upper respiratory tract infection. On admission, he appeared listless and sallow. Routine blood tests revealed the following: object out 92 g/L，RBC 4.21×10^{12}/L，MCV 68.4 fl，PCV 0.288，and Ret 0.01. On day 2 after admission, he was given an IV infusion of ceftriaxone 1.0 g dissolved in 100 ml of glucose 5% again. Five hours later, he developed yellowish of the skin, and further 2 hours later, dark urine and temperature of 39 ℃ occurred. Laboratory testing showed the following: object out 45 g/L，RBC 1.83×10^{12}/L，PCV 0.12，Ret 0.03，and a positive direct Coombs test. Acute hemolytic anemia was diagnosed. Ceftriaxone sodium was stopped immediately. He was treated with IV dexamethasone, IV immunoglobulin, and a red cell transfusion. His symptoms were relieved, and laboratory testing showed the following: RBC 3.60×10^{12}/L，Hb 91 g/L，PCV 0.289，and Ret 0.036.

KEY WORDS ceftriaxone sodium; acute hemolytic anemia; adverse reaction