

Short-term amlodipine induced liver injury : an extremely rare acute complication

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To the Editor,

Toxic liver injury comprises an insidious and potentially devastating complication of pharmaceutical preparations. Drug-induced hepatotoxicity may virtually mimic any form of chronic or acute liver disease (1). Amlodipine is a long-acting dihydropyridine calcium antagonist used as an anti-hypertensive agent (2). Treatment with amlodipine is usually well-tolerated and overwhelming majority of adverse reactions reported during amlodipine treatment are of mild or moderate severity (3). Herein, we report of an unusual and extremely rare case with short-term amlodipine induced hepatotoxicity (liver injury). A 46 year-old man was admitted to the cardiology clinic for refractory hypertension. He had a history of 3-year ramipril treatment to lower high blood pressure. He was then prescribed 10 mg amlodipine and stopped taking ramipril. The liver function tests were normal during this period. After 1 week of amlodipine treatment, he was controlled in an outpatient unit and referred to the gastroenterology clinic due to elevated liver enzymes. His physical examination did not show any pathologic signs and serological tests excluded viral, autoimmune or metabolic liver diseases. Laboratory analysis revealed a total bilirubin of 1.44 (0.2-1) mg/dL, SGOT 519 (10-40) U/L, SGPT 923 (10-40) U/L, alkaline phosphatase 102 (38-155) U/L, gamma-glutamyltransferase 521 (10-49) U/L, albumin 4.23 (3.5-5.5) g/dL, amilase 53 (25-90) U/L, prothrombin time-international normalized

ratio (PT-INR) 14.2-1.016, normal complete blood count and normal electrolyte panel values. Abdominal ultrasound with Doppler and computed tomography (CT) scan with intravenous contrast were normal. We performed percutaneous liver biopsy for the diagnosis of liver disease. Liver biopsy revealed lesions consistent with drug-induced hepatotoxicity. Following discontinuation of amlodipine, biochemical tests of liver function promptly normalized within 3 weeks. Amlodipine induced hepatotoxicity is extremely unusual and rarely reported in the literature. Related literature with amlodipine induced hepatotoxicity exclusively reports on long-term use of amlodipine (4, 5). To the best of our knowledge, this is the first reported case of acute liver injury (hepatotoxicity) induced by short-term amlodipine usage. In conclusion, for patients treated with amlodipine, vigilant monitoring is warranted both in acute and long term to recognize adverse effects.

References

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