Letters to the Editor

Advance Access publication 14 February 2011

Two cases of pregabalin neurotoxicity in chronic kidney disease patients

Sir

We report two cases of newly presenting pregabalin neurotoxicity in chronic kidney disease (CKD) patients. A 67-year-old man was referred to our nephrology department for consultation. He had been admitted to the department of orthopedics because of spinal stenosis and had undergone surgery 5 weeks earlier. He had started hemodialysis 3 months previously. Upon presentation, he was in a deep drowsy mental state. He was also suffering from generalized myoclonic jerk, aphasia and dysarthria of several days duration. We did not detect a brain lesion on magnetic resonance imaging or computed tomography. No medications were being given that could have induced his neurologic symptoms and signs. No laboratory abnormalities were detected that would explain his neurologic deficits. However, pregabalin had been started at a dosage of 300 mg/day 2 weeks before presentation, and the dosage had been increased to 450 mg/day 7 days previously. We concluded that his neurologic deficits were the result of pregabalin toxicity. Pregabalin was immediately withdrawn and an additional three hemodialysis sessions were performed, after which the patient became mentally alert and the generalized myoclonus, aphasia and dysarthria completely disappeared.

The second case is that of a 43-year-old man who was admitted for evaluation of nausea, vomiting and general weakness. He was diagnosed with diabetes mellitus and CKD Stage 4. Three days after admission, he complained of pain around the posterior neck region and in both shoulders. He was diagnosed with fibromyalgia and commenced therapy with pregabalin. After receiving a 75 mg/day dose of pregabalin for 2 days, he developed a drowsy mental state, whereas one case occurred in a patient undergoing peritoneal dialysis. Our first patient was also undergoing hemodialysis, whereas the second one was a CKD Stage 4 patient. To the best of our knowledge, there have been no reports of pregabalin toxicity in a Stage 4 CKD patient. In our first patient, although the initial dosage of pregabalin was high, there were no severe symptoms and signs before the increase in dosage. This might have been the result of drug removal by regular hemodialysis. Although we reduced the dosage of pregabalin in accordance with his renal function in the other patient, pregabalin neurotoxicity did occur. We think that a 75 mg/day dosage might not increase the serum level of pregabalin enough to induce neurologic impairment, although we did not measure the drug level in the serum.

One should exercise prudence when prescribing this drug in a CKD patient and adjust the dosage in accordance with renal function. The drug should be immediately withdrawn if neurologic symptoms and signs appear.

Conflict of interest statement. None declared.

1Department of Internal Medicine, School of Medicine Gyeongsang National University, Jinju, South Korea
2Institute of Health Science, School of Medicine Gyeongsang National University, Jinju, South Korea

Correspondence and offprint requests to: Dong Jun Park; E-mail: drpdj@korea.com


doi: 10.1093/ndtplus/sfq219