



Tacrolimus-Induced Focal Myoclonus of Unilateral Hand in a Kidney Transplant Recipient

Dear Editor,

Tacrolimus-induced severe neurotoxicity in the form of myoclonus, seizures, and leukoencephalopathy is uncommon and occasionally reported in kidney transplant recipients.¹

A 33-year-old woman presented 11 weeks after kidney transplantation with abnormal movements of right hand for 2 days. Movements were rapid, continuous, dystonic, irregular, jerky, and myoclonic, predominantly involving fingers, and were nonsuppressible and also occurred intermittently during sleep [Video 1]. There was no bradykinesia, rigidity, or muscle weakness, or any other signs of neurologic involvement. Five weeks earlier, she was detected to have hyperglycemia and her tacrolimus trough level was 19.7 ng/ml (0.12 mg/kg daily dose of tacrolimus). Her tacrolimus dose was reduced, and blood glucose was actively controlled. Electroencephalogram (EEG) and magnetic resonance imaging (MRI) brain were normal. Tacrolimus dose was further reduced, and she was started on lacosamide, clobazam, and propranolol. The myoclonic jerks were persistent. Given high tacrolimus trough levels and adequate glycemic control, the neurologic findings were attributed to tacrolimus toxicity. Tacrolimus was switched to cyclosporine 5 mg/kg/day (target levels 150–250 ng/ml). The patient improved and was symptom free within the next 3 days. Oral hypoglycemic agents, antiepileptic drugs, and propranolol were discontinued within the next 4 weeks. Six months posttransplant, the patient was symptom free with normal blood sugar levels.

Development of neurotoxicity does not always correlate with high blood levels of tacrolimus.² Tacrolimus has been reported to cause generalized myoclonus, myoclonus of both lower limbs, and segmental myoclonus of abdominal wall.³⁻⁵ Our patient developed isolated myoclonus of one hand in association with raised blood tacrolimus trough levels. We excluded other causes of her neurologic manifestations after a detailed physical examination and laboratory and radiological work-up.

Declaration of patient consent

Informed consent was obtained from the patient.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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