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LETTER TO THE EDITORS

Recurrent ecchymoses after acute tacrolimus intoxication

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Sirs,

We report on a 3.5-year-old girl with acute tacrolimus overdose associated with bleeding tendency. The patient who had steroid-resistant nephrotic syndrome secondary to immunoglobulin M (IgM) nephropathy was put on tacrolimus. Other medications included acetylsalicylic acid, prednisone, and amlodipine. Initial tacrolimus trough level was 8.1 ng/ml (target 7–12 ng/ml). One week later, the patient started complaining of abdominal pain, poor appetite, vomiting, diarrhea, headache, tachypnea, and leg pains in addition to gingival bleeding, easy bruisability, and epistaxis. Positive findings on physical examination were blood pressure 150/110 mmHg (>99th percentile) and multiple ecchymotic spots all over the body. Pertinent laboratory data were hemoglobin 10 gm/dl and platelets 307,000/mm^3. Prothrombin time (PT) was 13.6/13 s, partial thromboplastin time (PTT) 98/30 s, and bleeding time 12.5 (2.5–10). Uric acid was 12 mg/dl, potassium 3.1 mEq/L, and magnesium 1.89 mg/dl. Liver function tests, clotting factors, and serum creatinine were normal. Tacrolimus trough level was 28 ng/ml (target 7–12 ng/ml). Tacrolimus was discontinued and fresh frozen plasma was given repeatedly. Four months after the initial episode, our patient still gets recurrent ecchymosis. Tests for platelet aggregation disclosed IaIIa deficiency in the mother (asymptomatic) and child. No significant toxicity has been reported in most cases of acute tacrolimus overdose [1, 2]. Ecchymosis has not been reported previously in acute tacrolimus overdose in nontransplant patients. In one study in Italian kidney transplant patients whose immunosuppressive regimen included tacrolimus, ecchymosis was present in 3% of cases [3]. Inherited glycoprotein IaIIa deficiency and interaction with acetylsalicylic acid may have contributed in our case, especially to the prolonged duration of the ecchymosis.

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