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LETTER TO THE EDITOR

POSTTRANSPLANT DIABETES IN PEDIATRIC RECIPIENTS ON TACROLIMUS

We read with interest the report by Moxey-Mims et al., "Increased Incidence of Insulin-Dependent Diabetes Mellitus in Pediatric Renal Transplant Patients Receiving Tacrolimus (FK506)," reporting a 100% incidence of posttransplant diabetes mellitus in five pediatric patients receiving tacrolimus-based immunosuppression after renal transplantation (1). Although posttransplant diabetes mellitus (PTDM) has been a commonly observed complication in adult patients receiving tacrolimus, with an initial incidence of 6.0–28.3% and a final incidence of 2.5–12.8% (2–9), it has been less common in pediatric patients, and has tended to be reversible in the overwhelming majority of the cases (10–13). The incidence of 100% reported by the authors is substantially at variance with the incidence that we and others have seen; of perhaps greater concern is the seeming lack of reversibility in most of the patients. If we are to infer from their article, three of the five children are still on insulin.

Our speculation, to be frank, is that these patients are being chronically overimmunosuppressed. Steroid withdrawal has been possible in some two thirds of pediatric recipients (11), and, in patients not withdrawn from steroids, relatively low dosages can be achieved relatively soon after transplantation. In addition, the target tacrolimus levels described by the authors are high, although the actual figures described in the patients in question are not excessively out of range.

It has been our experience, and that of others, that PTDM is largely reversible with appropriate reduction in the dosages of both tacrolimus and prednisone. It would be interesting to see what would happen to the patients described in this article if an attempt was made to decrease the dosages of both tacrolimus and steroids.

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