Drug-induced gingival overgrowth after renal transplantation

Paige Kendall, BS, Janelle Vu Pugashetti, MD, and Paul Aronowitz, MD

Department of Internal Medicine, Davis School of Medicine, University of California, Sacramento, CA, USA.

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A 23-year-old male with a history of posterior urethral valves complicated by chronic kidney disease requiring renal transplantation at age 19 was incidentally found to have extensive gingival overgrowth on physical examination (Figs. 1 and 2). The gingival overgrowth developed several months after the patient's transplant and progressively worsened. His medications had included mycophenolate mofetil, tacrolimus, and amlodipine since his renal transplant 4 years prior.

Medications other than anticonvulsants and cyclosporine can cause gingival overgrowth.¹ This patient's gingival overgrowth was attributed to the combination of amlodipine and tacrolimus. Limited studies have demonstrated low rates of gingival overgrowth with tacrolimus,¹ with prevalence ranging from 0% to 29%. However, the incidence increases with concomitant use of calcium channel blockers and in those with poor oral hygiene.² As single agents, calcium channel blockers have also rarely been reported to induce gingival overgrowth.¹

Figure 1 Upper gingiva demonstrating extensive gingival overgrowth

Figure 2 Lower gingiva demonstrating extensive gingival overgrowth

Proper oral hygiene can help prevent progression, but will not reverse gingival overgrowth. Treatment options include discontinuation of causative medications and gingivectomy, although recurrence rates with this procedure are as high as 40%.

Corresponding Author: Paul Aronowitz, MD; Department of Internal Medicine, Davis School of Medicine, University of California, 4150 V Street, Suite 3100, Sacramento, CA 95817, USA (e-mail: paronowitz@ucdavis.edu).

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REFERENCES

- Academy Report: Drug associated gingival enlargement. J Periodontol 2004;75:1424–1431.
- L. Reali, E. Zuliani, L. Gabutti, C. Schonholzer and C. Marone. Poor oral hygiene enhances gingival overgrowth caused by calcineurin inhibitors. Journal of Clinical Pharmacy and Therapeutics (2009) 34, 255–260.

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