Clinical Case Reports

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CLINICAL IMAGE

Amlodipine-induced gingival enlargement

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Key Clinical Message

The three most common classes of medications implicated in drug-induced gum enlargement are anticonvulsives, calcineurin inhibitors, and calcium channel blockers. Treatment primarily consists of withdrawing the offending agent whenever possible, in addition to maintaining good oral hygiene. Gingivectomy or flap surgery may be needed in resistant cases.

Keywords

Amlodipine, calcium channel blocker, gum enlargement.

Case Description

A 50-year-old man has presented with enlarged gums in the upper and lower front jaws for 2 months. His medical history was significant for hypertension and diabetes mellitus type 2. He denied any bleeding from the gums, loosening of the teeth, use of any prosthesis, or dental braces. His medications included enalapril 10 mg bid (for 2 years), amlodipine 10 mg per day (for 6 months), sitagliptin 100 mg per day (for 1 year), and glipizide 20 mg/day (for 4 years). Oral examination revealed marginal and interdental gingival enlargement, predominantly involving maxillary and mandibular anterior teeth (Fig. 1). The enlargement was firm, nontender with no bleeding on probing. Poor dental hygiene was noted. HIV and leukemia were excluded by appropriate laboratory testing. We diagnosed the patient with amlodipine-induced gingival enlargement, and he showed slight but notable improvement in 4 weeks after switching amlodipine to long-acting thiazide diuretic (Fig. 2). He was also referred to see a dental hygienist.

The incidence of this side effect varies among different calcium channel blockers, for example, nifedipine (6.3%), amlodipine (1.7%), and diltiazem (2.2%) [1, 2]. It may take from 1 to 8 weeks for resolution of gingival overgrowth after discontinuing the offending agent [3].

Figure 1. Oral examination demonstrating marginal and interdental gingival enlargement, predominantly involving the maxillary and mandibular anterior teeth.

Figure 2. Oral examination 4 weeks after discontinuation of amlodipine, demonstrating improvement in the gingival enlargement.

Informed Consent

Informed consent has been obtained for the publication of this clinical image.

Authorship

All the authors: made substantial contribution to the preparation of this manuscript and approved the final version for submission. AK: designed and drafted the manuscript. IJ: acquired the images and performed the literature search. HRM: revised the manuscript for critically important intellectual content and approved for final submission.

Conflict of Interest

The authors have declared that no conflict of interest exists.

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