

Case report: drug-induced gingival overgrowth associated with the use of a calcium channel blocker (amlodipine)

Précis

A case of gingival overgrowth induced by: (i) poor plaque control; and, (ii) a calcium channel blocker (amlodipine), and its conservative and surgical management.

Abstract

INTRODUCTION: Many factors can contribute to the development of gingival overgrowth (hyperplasia), including: plaque control; periodontal variables; medications and their relative dose; age; sex; and, genetic factors. Nifedipine is a calcium channel blocker commonly reported to result in drug-induced gingival overgrowth (DIGO). This report outlines a case of gingival overgrowth induced by amlodipine (a calcium channel blocker less frequently reported to cause gingival hyperplasia), exacerbated by the presence of plaque.

CASE REPORT: A 63-year-old male presented to the dental outpatient clinic at the Dublin Dental University Hospital with severe DIGO. He reported that his gums had started to enlarge two years previously, but that he was now concerned as they were increasing in size and had become firmer. Medically, the patient had hypertension, hyperlipidaemia, was taking amlodipine 10mg once daily, and was a former smoker. Following initial oral hygiene instruction and local debridement to reduce the gingival inflammation, some of the remaining excess gingival tissues were removed surgically and sent for histopathological analysis.

DISCUSSION: Two possible causative agents were identified as: (i) amlodipine medication; and, (ii) poor plaque control. The removal of the pedunculated lump mesial to tooth 1-3 and the hyperplastic mandibular gingiva allowed for definite histopathological analysis of "fibroepithelial overgrowth showing moderate chronic inflammation". Following the excisional biopsies there was improved access for professional and at home cleaning, in addition to an improved aesthetic outcome.

CONCLUSION: It is important that we are aware that individuals taking calcium channel blockers need to demonstrate excellent plaque control to reduce their risk of developing DIGO, and to reduce its severity should it arise.

Key terms

GINGIVAL HYPERPLASIA: 'an abnormal increase in the number of normal cells in a normal arrangement in an organ or tissue, which increases in volume'.¹

GINGIVAL OVERGROWTH (GO): Many terms have been used in the literature to describe clinically apparent enlargement of the papillary and marginal gingiva. It has been suggested that GO is a more general term that better describes the lack of understanding of the pathogenesis of the condition.²

Journal of the Irish Dental Association 2015; 61 (5): 248-251.



Dr Orla Carty

Dr Emer Walsh

Dr Ahmed Abdelsalem

Dr Denise MacCarthy

Corresponding author:

Dr Orla Carty, Liverpool University Dental Hospital, Pembroke Place, Liverpool, Merseyside L3 5PS UK
T: 0044 758 511 5455 E: carty.dental@gmail.com