

Amlodipine-Induced Gingival Overgrowth

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Abstract

Gingival overgrowth is a common feature of periodontal diseases. Rarely it occurs as an unwanted side effect of drugs such as anticonvulsants mainly phenytoin, immunosuppressants like cyclosporine and calcium channel blockers particularly nifedipine. Among calcium channel blockers, nifedipine causes gingival overgrowth in 10% of patients whereas amlodipine-induced gingival overgrowth is very limited. Here we report four cases in hypertensives on amlodipine.

Introduction

Gingivae or gum is one of the human health indicator. Increase in size of the gingival tissue is referred to as gingival overgrowth. It is a well known consequence of administration of drugs like anticonvulsants such as phenytoin sodium, ethosuximide, sodium valproate, immunosuppressants such as cyclosporine and calcium channel blockers like nifedipine. Amlodipine-induced gingival overgrowth is uncommon and here we report four such cases of gingival overgrowth secondary to amlodipine.

Case Report

We report four patients who

had different degrees of gingival overgrowth. Cases are summarised in Table 1 (Figures 1, 2, 3 and 4).

Discussion

Gingival overgrowth is due to fibroblast proliferation in gingival tissue and is graded based on Carranza's clinical score.

Grade-0: No signs of gingival enlargement

Grade-1: Enlargement confined to interdental papilla

Grade-2: Enlargement involves papillae and marginal gingivae

Grade-3: Enlargement covering three quarters or more of the crown

Table 1: Case summaries

Case	Age	Sex	Duration#	Dose	Grade*
1	43 yrs	Male	4 yrs	5 mg OD	III
2	50 yrs	Female	4 yrs	10 mg OD	I
3	65 yrs	Male	1 yr	2.5 mg OD	II
4	72 yrs	Male	12 yrs	2.5 mg OD	III

Gingival overgrowth may create speech, mastication and aesthetic problems. Gingival overgrowth is strictly clinically described term and the accepted current terminology for this condition. Terms such as hypertrophic gingivitis or gingival hyperplasia are no longer used. Treatment is non-specific and discontinuation of drugs cause prompt regression of the gingival enlargement.¹⁻³

References

1. Raman PG, Mishra VN, Singh D. Nifedipine induced gingival hyperplasia. *J Assoc Physicians India* 1988; 36:231-233.
2. Pradhan S, Mishra P. Gingival enlargement in Antihypertensive medication. *J Nepal Med Assoc* 2009; 48:149-152.
3. Joshi S, Bannel S. A Rare case report of Amlodipine- induced gingival enlargement and review of its pathogenesis, case reports in dentistry, Hindawi Publishing Corporation, 2013; 2013:1155-1157.



Case 1



Case 2



Case 3



Case 4

Fig. 1: Amlodipine-induced gingival hyperplasia

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