

P-23 Short term effect of Azithromycin on gingival overgrowth due to medication

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Objectives

Management of gingival overgrowth due to medication is bothersome because plaque control measures alone did not prevent gingival overgrowth. The best treatment of drug induced gingival overgrowth is discontinuing use of the associated drug, but this is not practical because of the drug's important role.

In this report we attempt to evaluate the short term effects of azithromycin which has shown to be of some benefit on gingival overgrowth due to medication

Patients and Methods

We studied 15 patients with gingival overgrowth due to medication (cyclosporin and/or calcium channel blocker) who scheduled for periodontal treatment. All patients received oral azithromycin once daily for 5 days : 500mg for the first day and 250mg for the remaining 4 days. Oral hygiene instruction was done before treatment. We measured papillary overgrowth index(POI) every interdental area before treatment and 2 and 4 week after. Oral hygiene instruction was done at every appointment.

Results

The frequency and severity of papillary overgrowth of patients was changed as follow.

Before treatment 50.6% of all papillae had overgrowth, and after 2 weeks it reduced significantly to 33.7% and after 4 weeks to 24.3%. POI value also reduced, before treatment POI value was 0.67, after 2 weeks it reduced significantly to 0.41, and after 4 weeks 0.30.

Some patients stated that the gingival bleeding on tooth brushing and gingival discomfort resolved within 2 weeks.

We could find the partial resolution of gingival overgrowth with a 5 day treatment of azithromycin, but no case is completely resolved within experimental period.

Discussion

Gingival overgrowth is well known complication in phenytoin, cyclosporin, and calcium channel blocker. Recent investigations reveal incidence ranges from 13% up to 85%, depending on the criteria

used. Surgical intervention may be required on a one-time basis, or repeatedly. Frequent SPT may minimize the chance of recurrence but not prevent recurrence of lesion.

Azithromycin is an azalide antimicrobial agent derived from the macrolide erythromycin with a similar mechanism of action but different antimicrobial profile, pharmacokinetics, and metabolism. It is not known whether the response to azithromycin was mediated through its antibacterial effect or another mechanism. But treatment of azithromycin partially reduce gingival overgrowth clinically.

We suggest that the treatment of azithromycin could be added to periodontal management of patient with gingival overgrowth due to medication.