

THE EFFECTS OF ALENDRONATE ON NATURALLY OCCURRING PERIODONTITIS IN MENOPAUSE WOMEN

Abstract

Previous studies have demonstrated an increase in bone mass and density with use of systemic alendronate sodium. This agent acts as an inhibitor of osteoclast activity, and is thought to result in more net osteoblastic activity. The purpose of this study was to evaluate the effect of systemic alendronate on naturally occurring periodontitis in menopause women. Thirty patients postmenopausal females were included in the present study with no relevant medical history. They were divided into two groups: group I received alendronate orally, the recommended dosage of alendronate was 10mg once a day, the alendronate was prescribed for treatment of osteoporosis in this group, and group II served as control. Cases were randomly selected from patients with a history of moderate advanced adult periodontitis and on supportive (maintenance) periodontal therapy. Standardized intraoral radiographs were made by the Digora system. Clinical measurement of plaque index, gingival index, pocket depth and attachment level were recorded monthly. Intraoral radiographs were made at baseline, 3 and 6 months. All clinical measurements revealed significant improvement at the end of the study. Bone mass was the primary outcome variable for the study, radiographic examination revealed increased bone density in both groups. There was a slight increase of bone density at 3 months in both groups. At 6 months there was increase in bone density in both groups where it was 27.5% in group I and 8% in group II. Statistical analysis revealed significant difference between groups in favour of group I. There was insignificant difference between both groups as regard plaque index, gingival index and pocket depth, however, the gain in attachment level between groups was non significant at 3 months, but the groups tended to show a significant difference at 6 months favouring the alendronate group. The results indicate that the use of alendronate in menopause women with periodontitis has clearly demonstrated that administration of alendronate reduced bone loss associated with periodontitis. The administration of alendronate may provide a strong adjunctive effect in the management of marginal periodontitis patients specially in menopause women.