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Gingival recession

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This report is related to the activity in BMS.

Abstract:

This report shall first discuss gingival recession in terms of its definition, and aetiology, then examine an experiment conducted on the matter.

Introduction:

Gingival recession is the most common and undesirable condition of the gingiva.

It is characterized by displacement of gingival margin apically from cement-enamel junction (CEJ) and exposure of root surface to the oral environment(1). For a patient, gingival recession usually creates an aesthetical problem, especially when such problem affects the anterior teeth, and anxiety about tooth loss due to progressing the destruction(3). It may also be associated with dentine hypersensitivity, and/or root caries, abrasion and/or cervical wear, erosion because of exposure of the root surface . it has gingival recession is multifactorial due to the oral environment and an increase in accumulation of dental plaque (such as excessive or inadequate teeth brushing, destructive periodontal disease, tooth malposition, alveolar bone dehiscence, high muscle attachment, frenum pull and occlusal trauma.) Other causative factors that have been reported are iatrogenic factors (orthodontic, or prosthetic treatment, and etc.) and smoking. However, bacterial plaque is of equal importance in the aetiology of gingival recession.(4)

Discussion

The participants in the study were 344 patients, males and females, 18 to 68 years of age (mean age of 46 ± 3.8 years) that sought dental treatment in a private practice in Patra, one of the biggest cities in Greece (4). The samples of the study consisted of participants who had gingival recession. All examinations were performed by the author of the article. The participants were in good general health as estimated by a health questionnaire. (5) Statistical analysis showed that 273 participants (79.4%) had class I gingival recession, (15.3%) class II, 14 (4.0%) class III and 5 (1.2%) class IV, according to the Miller's classification. The most frequent affected teeth with gingival recession were maxillary 1st and 2nd molars followed by the mandibular ones

Regarding the tooth brushing method and type of toothbrush, horizontal brushing method and usage of medium type of toothbrush were found to be more injurious to marginal gingiva leading to gingival recession. As mentioned above 165 (48.0%) males and 179 (52.0%) females showed gingival recession. (1) This finding is in agreement with the findings in a study by Kozłowska et al. in which, 74% of females and , 28% of males showed gingival recession, respectively(3). However, other studies^{10–17} showed that gingival recession was greater in males than in females. Gender differences regarding the prevalence of gingival recession could be attributed to the fact that females visit their dentists more frequently than males. In the present study, the most frequent affected teeth with gingival recession were the maxillary 1st and 2nd molars followed by the mandibular ones(4). Previous studies showed that the more frequently teeth with recessions were the anterior teeth of the mandible, mandibular premolars, , 1st molars, maxillary canines and 1st premolars(5). , Checchi et al . showed that canines of both jaws were the most frequent teeth affected by gingival recession. Muller et al. found that 1st and 2nd molars of both jaws were the most frequently teeth affected by gingival recession(7). However, Murray²⁴ showed that the most frequent teeth with gingival recession were mandibular incisors followed by 1st maxillary molars, 1st mandibular molars, premolars of both jaws, 2nd maxillary molars, 2nd mandibular molars and canines.(8) Maxillary incisors showed the lowest prevalence of gingival recession.(6)

Conclusion

The majority of the participants showed Miller's class I gingival recession and its overall prevalence was greater in males than in females.

The most frequent affected teeth with gingival recession were the 1st and 2nd molars of maxilla and mandible. (3)

Horizontal brushing method, usage of medium type toothbrush and tooth brushing once daily were found to be more associated with gingival recession.

The association between dental plaque, gingival inflammation and gingival recession was found to be statistically significant.

Malpositioned teeth especially labially positioned teeth were associated with gingival recession. (4)

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