Root resorption and orthodontic treatment: Literature review

Abstract

Root resorption can cause root shortening and even tooth loss in a silent and asymptomatic manner, so it is important to know and identify the risk factors that cause and contribute to its occurrence, so that it can be managed during treatment orthodontic. The prognosis of resorption due to orthodontic treatment is generally favorable, because in most cases the resorption process ceases after force removal, followed by recomposition of the cementoblasts layer, leaving the root with a rounded appearance. The purpose of this study was to elaborate a literary review on the risk factors of root resorption and how to proceed in case of occurrence. It was concluded that root resorption is an undesirable effect and present in most orthodontic treatments, so it is important to inform the patient about its risk of occurrence and consequences and the orthodontist to know how to manage this problem when it occurs. The professional should be aware, regardless of the type of the appliance used, the magnitude of the orthodontic force employed, history of dental trauma, root morphology, amount of dental movement required, estimated total time of treatment, local systemic and anatomical conditions. The most susceptible teeth to resorption appears to be the maxillary central incisors, therefore it is recommended to x-ray them 6-9 months after the beginning of the orthodontic treatment and, if there are signs of resorption, use light forces or even interrupt the application of forces for two or three months and to monitor the progression of the treatment radiographically.

Descriptors: Diagnosis. Orthodontics. Root Resorption.

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