Orthodontics and overall oral health

In the last few decades, orthodontic treatments steeply gained in popularity, so that in western countries it is now almost rare to find a teen without braces or some other orthodontic appliance. The desire to have a perfect, esthetic, healthy smile drives many adolescents as well as adults to go through orthodontic tooth alignment in various forms. Numerous emerging technologies are being introduced to the field, with different levels of success and evidence-based support.

There are, however, several issues of concern that should be an integral part of orthodontic treatment planning, execution, and follow-up. First, it should be noted that many patients will perceive their orthodontist as the primary dental caregiver for the period of the treatment. Patients will, in some cases, not seek regular dental check-ups and treatment since they believe that their frequent visit to the orthodontic clinic will provide that. If this is not the case (as in most orthodontic practices), it should be stated and repeated frequently to avoid oral health neglection and deterioration during the rather long time of orthodontic treatment.

Another important issue is the possible misdiagnosis of periodontal diseases prior to or during the orthodontic treatment. Orthodontists should be sure to get periodontal clearance before initiating orthodontic treatment in adults as well as young patients since the common age range for orthodontic treatment might overlap with the age in which aggressive forms of periodontal diseases are initiated and diagnosed. It is highly important to have proper periodontal follow-up during the period of the orthodontic treatment. In case of suspected periodontal deterioration, orthodontic treatment should be discontinued until periodontal stability is achieved and maintained. A frequent recall program should also be adopted during orthodontic treatment in order to provide better plaque control and to prevent the development of periodontal or dental diseases.

Orthodontic devices are potential plaque retainers and could lead to difficulties in plaque control and deterioration of oral health in moderate- to high-risk patient populations both from the periodontal and the caries points of view. Evidence for this could frustratingly be the white spot lesions that are created sometimes during orthodontic treatment when plaque control is impaired.

It is essential, therefore, to make it very clear to patients that meticulous oral hygiene is a crucial condition for orthodontic treatment initiation and continuation. Orthodontic treatment should not be introduced before adequate oral hygiene is achieved and maintained; this should be evaluated in each visit to the orthodontic practice and, in case of deterioration of oral hygiene performance during orthodontic treatment, the treatment should be discontinued until proper hygiene is reestablished.

It should be remembered that orthodontic treatment, in most cases, is an esthetic, elective treatment and if it results in deterioration of the general oral (dental and periodontal) health, we might be causing more harm than good for our patients. Our urge to solve the esthetic issues and to please our patient population should not jeopardize their oral health, and it is our responsibility to make sure it doesn’t happen.

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