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Different approaches to anchorage: A survey and an evaluation

Birte Melsen, DDS, Dr. Odont;^{a, b} Carles Bosch, MD, MS, DDS, Dr. Odont^c

^aBirte Melsen, Royal Dental College, Department of Orthodontics, Aarhus University, Vennelyst Boulevard, DK-8000 Aarhus C, Denmark

^bB. Melsen, professor and head, Department of Orthodontics, Royal Dental College, Aarhus University, Denmark.

^cC. Bosch, assistant professor, Department of Orthodontics, Royal Dental College, Aarhus University, Denmark.

ABSTRACT

Orthodontic treatment outcome is often compromised by the loss of anchorage. The forces acting on the anchorage unit have, however received surprisingly little attention, and the loss of anchorage is most frequently expressed in the sagittal occlusal relationship. The present paper discusses the interaction between vertical and sagittal components of dentofacial development, and the importance of taking vertical forces into consideration is stressed. The biological background for anchorage is reviewed, i.e., the impact on the cellular reaction of the periodontal ligament around the teeth of the anchorage unit from the orthodontic force system and from occlusion. A new rigid appliance consisting of two occlusal splints connected with transpalatal arches is introduced. The advantage of using the patient's sense of occlusion as part of anchorage by means of this appliance is demonstrated in a number of case presentations.

KEY WORDS: Anchorage, Posterior stability, Extrusion, Reactive unit, Active unit, Biological anchorage, Posterior rotation, Biomechanics.

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