



Orthopedic Treatment of Class III Skeletal Malocclusions

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The purpose of this editorial is to shed light on the debate among orthodontists concerning the effectiveness of early orthopedic treatment of skeletal Class III malocclusions.

A Class III incisor relationship is one of the most difficult malocclusions to correct orthodontically, mainly because of the uncertainty of a satisfactory and stable outcome after growth.

The final goal of any orthodontic treatment should be not only to obtain good function but also to improve facial attractiveness. The major focus of distress for the Class III patient, characterized by straight or concave profile, a retruded nasomaxillary complex, and a protruded soft tissue lower face, may be the soft tissue profile rather than the teeth in occlusion. However, attaining a balanced soft tissue facial profile is occasionally challenging because a Class III malocclusion is one of the most puzzling problems opposing the orthodontist.

Among the orthodontic fraternity, treatment for skeletal malocclusions especially related to Class III, has been varied. Role of orthognathic surgery or orthopedics as such has not been confirmed and its role depends on case to case, especially among growing children.

Surgical method is the only choice and cannot be treated by conventional treatment in cases of mandibular prognathism, as it carries an inherent genetic marker, is what most orthodontists view. Alternatively, effective orthopaedic treatment can stop the problem from becoming more severe, can remove or reduce the need for a full surgical method and will advance the psychosocial welfare and esthetic appearance of the patient during the adolescent years, which are the supreme influential years of their lives. Whichever treatment is selected, it should provide stability in terms of function and aesthetics over time.

Most of the adult patients with Class III malocclusion are untreated cases, usually indicated for orthognathic surgery, they need to be treated in the early stages, chin cup therapy and facemasks.

Protrusive mandible and mandibular dentition, retrusive maxilla and dentition, also a mixture of these features are clinical features of skeletal Class III. Apart from maxillary deficiency in few cases, there is hyper mandibular development in most Class III patients. This has in good number of Class III cases, with mandibular protrusion and maxillary retrusion, it leads to make maxilla a significant problem.

Experimental research done on animals showed that protraction forces can motivate or induce growth in the sutures of maxilla. In high proportion of Class III malocclusion cases, the first line of treatment is maxillary protraction.

A high amount of research has concentrated on effects of orthodontic treatment with a shorter time period. On the other hand, only few of these evaluated the long-term craniofacial effects of orthopedic management.

Finally it is vital and valid to say early orthopedic treatment for skeletal Class III malocclusion especially in cases of Class III caused by maxillary retrusion using face mask with rapid palatal expansion which is needed for mobilization of maxilla during protrusion, is a valid way treatment even if there will be some degree of relapse.

On the flip side, conventional orthodontic treatment can produce acceptable results and also reduce the need for invasive surgical approaches, as a result, will bring about a positive acceptance from the patient and improve his or her psychological profile tremendously [1-3].

Bibliography

1. E Abuhijleh., *et al.* "Profile changes associated with different orthopedic treatment approaches in class III cases". *Angle Orthodontist* 74.6 (2004): 731-738.
2. E Abuhijleh., *et al.* "Comparison of skeletal and dentoalveolar effects of chincup and chincup + bite plate therapies". *Turkish Journal of Orthodontics* 18 (2005): 11-26.
3. E Abuhijleh., *et al.* "Evaluation of maxillary protraction and fixed appliance therapy in Class III patients". *European Journal of Orthodontics* 28 (2006): 383-392.

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