

therapeutic system should be established according to the intra-articular pathologic status and executed appropriately with orthodontic approaches to produce stable occlusion at splint-induced condylar position, which is speculated to produce optimal intra-articular environment leading to functional remodeling of the condyle with bone resorption regarded as TMJ-OA.

## OP-10 구연

### Effect of high-pull headgear and Class III elastics on non-surgical treatment for adult open bite

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Orthodontists are often faced with various types of an anterior open bite in adults. If an open bite case shows neither severe skeletal problems nor remarkably imbalanced facial profile, we'll try to treat them without surgery. The morphological indications of an anterior open bite include a steep mandibular plane and increased anterior facial height, both of which reflect mainly downward and backward rotation of the mandible. In some cases, an anterior open bite can be also attributed to excessive proclination of the dental arch with mesial inclination of the posterior teeth. Therefore, we have to make an effort not to cause mandibular further rotation and molar extrusion while active treatment. High-pull headgear to the upper molars may be one of the best approaches to improve an anterior open bite without remarkable extrusion of the upper molars. Class III intermaxillary elastics combined with high-pull headgear are also helpful in uprighting the lower molars and in correcting the lower occlusal plane. In this presentation, I'm going to introduce two open bite cases non-surgically treated by the standard edgewise appliance along with high-pull headgear and Class III elastics, and to describe the effect of this mechanics on non-surgical treatment of open bite. Case 1 : 19 years and 1 month old female showing slight skeletal Class II open bite but Angle Class III dental relationship. Case 2 : 20 years and 4 months old female showing severe skeletal Class II open bite without increased lower facial height.

## OP-11 구연

### Orthopedic versus surgically assisted maxillary expansion – Which cases & when? (악정형력에 의한 상악골 확장과 외과적 술식을 동반한 상악골 확장 – 어떤 경우에 언제?)

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The envelope of change in the transverse dimension is significant in the growing patient where orthopedic expansion can be done. In the non-growing patient, mild alveolar bone remodeling can accomplish half of that change. Beyond that, surgery is needed for correction of deficient maxillary arch width. Two different techniques, multi-segmented maxillary surgery or surgically assisted rapid maxillary expansion (RME), can be used for surgical palatal expansion. If surgery is needed, I prefer surgically assisted RME, which I feel is more stable. To support this portion, I like to cite an article by Dr. Proffit at UNC published in 1996 in International Journal of Adult Orthodontics and Orthognathic Surgery. In this study, the most stable maxillary surgery was a maxillary impaction, and the least was a segmental upper jaw used to widen the maxilla. Indications for surgically assisted RME are