

Full mouth Rehabilitation of the Extremely Worn Dentition due to Bruxism Induced by Epilepsy

Jae-hyeon Jeong *, Dong-wan Gang
(Chosun University)

The occurrence and pattern of tooth wear are related to cultural, dietary, occupational, and geographic factors. Excessive occlusal wear can result in pulpal exposure, occlusal disharmony, functional inability and so on.

Surface loss can be differentiated into 3 general causal categories : mechanical loss, which includes attrition, and abrasion ; chemical loss, which includes erosion ; and finally, a proposed biomechanical category described as abfraction. With mechanical wear, restorations tend to wear at the same rate as adjacent tooth structure. Teeth with severe mechanical wear are frequently asymptomatic and patients may report parafunctional habit.

This patient has bruxism and epilepsy for 10 years. Inadequate or unstable posterior support has been identified as a factor in severe anterior attrition and decreased occlusal vertical dimension. Posterior occlusal prematurities also may cause increased function on anterior teeth, resulting in increased wear. Wear facets display sharply defined peripheries that can be matched on articulated diagnostic casts. Also, has been in Class III malocclusion tendency, and the patient has some loss of facial contour that includes drooping of the corners of the mouth.

In this cases, the alteration of OVD can provide an important biologically compatible adjunct to treatment and can improve dentofacial esthetics, create improved visual proportions in facial height, and provide mechanical solutions for force-management concerns of the masticatory system.

Patient require extensive restorative treatment to regain appropriate function, esthetics, and comfort.

By means of Farhad Fayz, the average vertical distance from the maxillary to the mandibular mucolabial reflections in the region of the central incisors was approximately 34mm. This patient has 32mm vertical distance so that leaf gauge 20 sheets added for vertical dimension decision method.

A removable occlusal overlay splint that restores OVD to estimated optimal position for the patient is usually the first trial restoration. The patient observed periodically for 6 weeks while appropriate adjustments are made and function at that dimension. When the patient is comfortable with the splint, the teeth are prepared and provisional restorations are placed for 3 months. The provisional restoration is fabricated from a diagnostic wax-up.

If the patient is comfortable, the final restorations mimic the occlusal vertical dimension, function, and esthetics that have been developed in the treatment restorations.

Restoration of the extremely worn dentition presents a substantial challenge to the dentist.

So that, careful evaluation of the etiology, history, and factors relative to occlusal vertical dimensions are essential to appropriate treatment planning.