

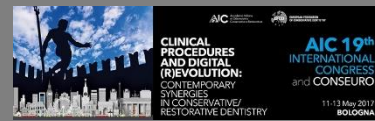


Restoring tooth wear from bruxism and corrosive agents with composite restorations

*Kafetzi Dimitra**, *Vasilopoulos Nektarios-Nikolaos**, *Papazoglou Efstratios***

*Postgraduate student, ** Associate Professor

Operative Department, Dental School, National and Kapodistrian University of Athens, Greece



Introduction: The non-carious extensive loss of tooth hard tissue, especially in the occlusal and cutting surfaces is a growing phenomenon. The first step is to identify its causes and control them, followed by the functional and aesthetic restoration of teeth. In the past, such cases were usually restored by conventional prosthodontic procedures. Nowadays, the evolution of the adhesive techniques and the materials offers new alternative approaches to rehabilitation.

Case report: The management of generalized loss of hard tissue on occlusal /cutting and palatal surfaces in a 30 years old patient is described here. Bruxism and high consumption of carbonated beverages were identified as the major causative factors. The treatment selected was direct and semi-direct composite resin restorations at an increased vertical dimension. After the recording of the centric relation, a diagnostic wax-up was made.



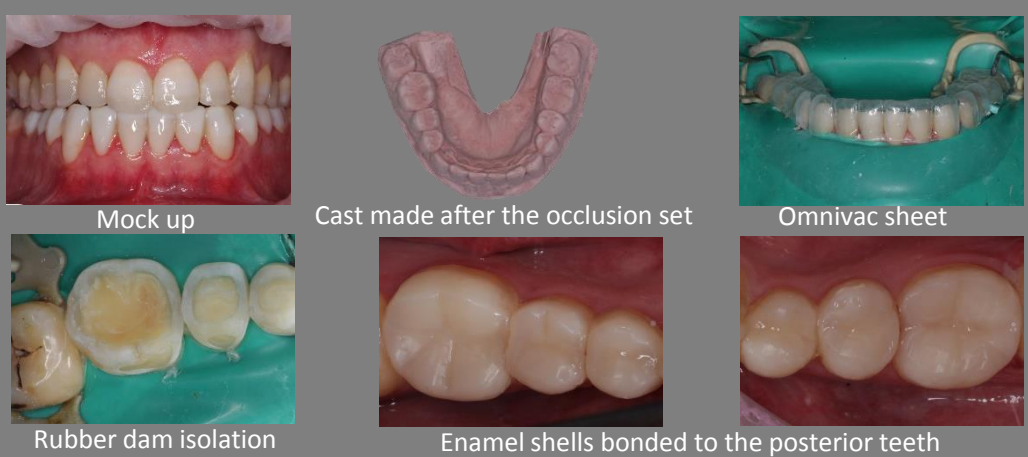
First step: The occlusal surfaces of the upper posterior teeth were directly built using silicone keys.



Second step: Direct restorations of the palatal and cutting surfaces of the upper anterior teeth.



Third step: The mandibular posterior teeth were restored with semi-direct technique. Specifically, the wax-up was transferred intraorally through the procedure of the mock-up and the occlusion was set. An impression was taken and a cast was made. Thin enamel composite shells were fabricated using this cast and the original cast, and these shells were bonded to the unprepared teeth with composite resin.



Fourth step: Lower anterior teeth were restored with direct composite restorations.

Finally, an occlusal splint was constructed in order to maintain the therapeutic result.



Conclusion: The functional and aesthetic rehabilitation was achieved by a minimally invasive approach preserving the remaining sound tooth structure

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2) Milosevic A, Burnside G. The survival of direct composite restorations in the management of severe tooth wear including attrition and erosion: A prospective 8-year study. J Dent. 2016 Jan;44:13-9. doi: 10.1016/j.jdent.2015.10.015. Epub 2015 Nov 2.