Class II cavity direct composite restoration on a young permanent premolar

Procedure/Study by
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myClip 2.0
sectional matrix system

Marina Papachroni graduated in 1995 from dental school at the University of Athens. She completed a three-year post-graduate program where she received her pediatric dentistry specialization certificate in 1999 and a two-year master’s degree in dental materials in 2001 from the same university. Thereafter, she has attended numerous congresses, courses and continuing education programs. She is the Treasurer of the Board of the Hellenic Academy of Clinical Dentistry and a member of the Hellenic Society of Pediatric Dentistry, European Academy of Pediatric Dentistry and International Association of Pediatric Dentistry. Lately, she is lecturing on Bioactive Materials, Restorative Pediatric Dentistry and Pulp Therapy of Primary teeth. The current focus of clinical research is Bioactive Restorative Materials. Dr Papachroni runs her private practice in Patras, Greece, with emphasis on aesthetic and microscopic pediatric dentistry.
Case Report

For young patients rebuilding the anatomy in class II cavity restorations is a major issue but not making too many occlusal adjustments after finishing the layering procedures is one of the same importance aspects. The following images show the step-by-step treatment we performed for treating decay on the upper first premolar of a 15-year-old teenager.
01

Pre-operative situation showing a class II carious lesions on the upper first molar.

02

The view after rubber dam isolation. The rubber dam was placed in order to have optimal control of the operating field.
Cavity preparation after removing decay and cleaning.

Particular attention was paid to the correct positioning of the sectional matrix to enhance the adaptation to the tooth. myClip 2.0 was combined with extremities myTines Small, specifically designed for young permanent teeth or teeth with short crown height.
Occlusal view of the direct composite restoration immediately after removing the sectional matrix system. The perfect adaptation of the matrix at the buccal and palatal margins of the restoration produces fewer flashes and reduces the time of finishing.

Final restoration without rubber dam. Check the tight contact point between premolars.
Conclusion

In conclusion, a functional contact surface is achieved by using the most suitable matrix system, a good separation ring between the teeth and by having a very nice adaptation of the matrix to the preparation walls. These three steps in young permanent teeth are achieved with the separation ring myClip 2.0 and the extremities myTines small.