



Premolars with SimpliShade.

Prof. Angelo Putignano

Reestablishing the point of contact properly in class II has always been a challenge for clinicians, especially in premolars. Success relies on fitting the matrices correctly with appropriate rings and re-establishing the correct proportions. This clinical case involves replacing two incongruous restorations. We employed a simple technique of breaking the wedge to insert the ring, ensuring a proper fit for the two sectional matrices. Finally, we completed the restorations using the Essential Lines technique.



Fig.1 Initial situation. The 65-year-old patient presented with old infiltrated composite restorations that required replacement to address carious lesions and restore the tooth structure.

About Prof. Angelo Putignano



- M.D. degree and D.D.S. post graduate certificate from University of Ancona-Italy
- Full professor in Restorative Dentistry at School of Dentistry Polytechnic University of Marche-Ancona-Italy
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- Private practice limited to Restorative Dentistry in Ancona, Italy
- He is co- author of the book "Adhesive Dentistry: the Key to success" edited by Quintessence International.
- Co-Author of "Indirect Conservative Restoration of Posterior teeth" (UTET 2008)
- Prof. Putignano is lecturing internationally on adhesive & aesthetic restorations.



Fig.2 After rubber dam application, the old restorations were removed and two class II were obtained.

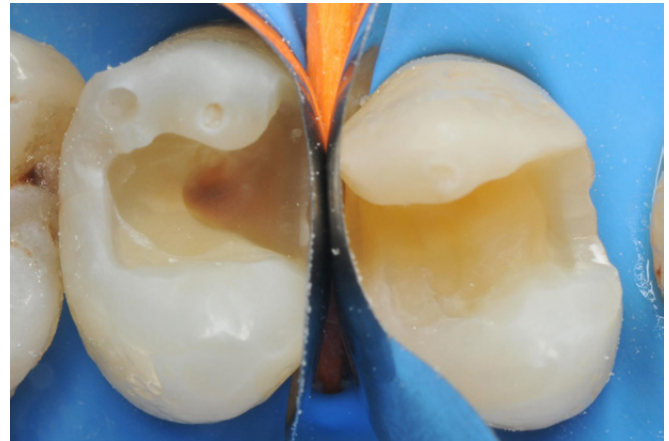


Fig.3 After cavity preparation, two sectional matrix were placed on each cavity to achieve the correct and tight as possible contact, and then secured with an orange wooden wedge.



Fig.4 After which, the outer part of the wedge is broken off, so that only the part of the wedge in the interproximal zone remains.

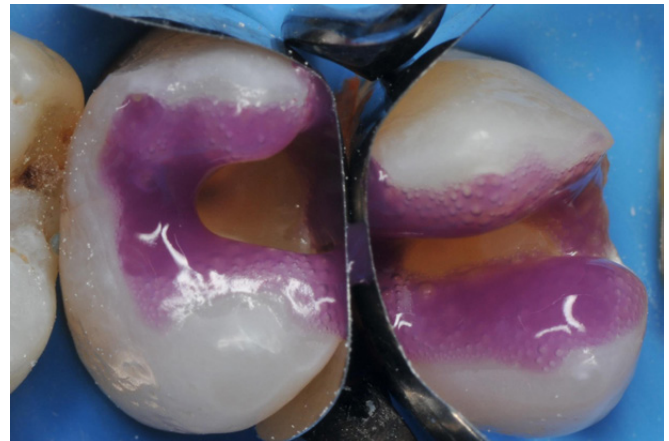


Fig.5 In this way, the ring used closed the matrix as tightly as possible on the tooth surface, reconstituting the correct proportions of the two teeth. It's noteworthy to achieve proper sealing of the matrix on the class II cavity box.



Fig.6 A selective enamel etching was performed for 30 seconds.



Fig. 7 After rinsing and drying for the same time as used for etching, OptiBond™ Universal by Kerr was applied for adhesion.

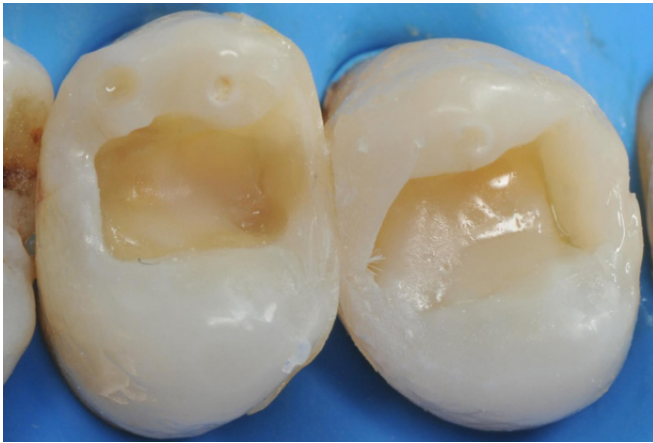


Fig.8 As the last step of the adhesion protocol, a thin layer of bulk flow composite (SimpliShade™ Bulk Fill Flow by Kerr) was applied to cover and protect the hybrid layer and regularize the cavity floor. By reconstituting all the interproximal walls, two class I were obtained.



Fig. 9 To complete the filling of the cavity, a single mass of bulk-fill composite (SimpliShade™ Bulk Fill composite) was used for each cavity, and once the material was compacted and adjusted by removing excess, the occlusal morphology was modeled.



Fig. 10 The essential lines of each premolar was drawn according to the anatomy of the tooth.



Fig. 11 The characterizations were applied to finalize the restorations.



Fig.12 After that, a Medium OptiDisc™ was used to finish the restorations at a low-speed.



Fig.13 The polishing was performed using a HiLuster™ Polishing System at low-speed



Fig. 14 Finally, the Occlubrush™ was used to complete the polishing of the restorations, which was done at the same appointment.



Fig. 15 The final aspect of the restorations before the rubber dam removal.



Fig. 16 The final result after rubber dam removal.



Fig. 17 Final aspect after 1 month follow-up.



Fig.18 The X-ray investigation shows no apical radiolucencies of the two premolars and therefore the vitality of the pulp is maintained after 1 month follow-up.

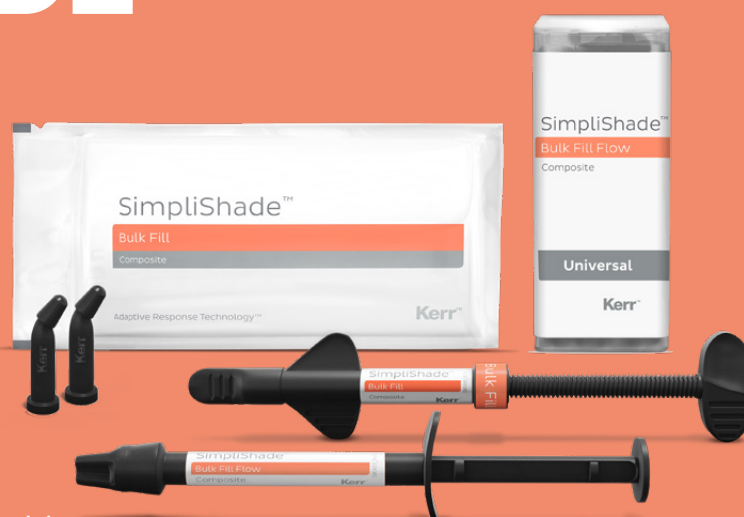
Conclusion

The best strategy to obtain optimal results lies in choosing the simplest technique that works best in your hands. Proper choice of matrix and wedge is critical in class two restorations. The latest generation of bulk-fill composites has excellent properties with optical characteristics that improve the aesthetic result. The Essential lines technique offers an alternative technique to quickly and effectively conclude the restoration, obtaining a satisfactory result.

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MKT-24-0833 Rev-0

Disclosure: Prof. Angelo Putignano is a consultant for Kerr. The opinions and technique expressed in this article are based on the experience of Prof. Angelo Putignano. Kerr is a medical device manufacturer and does not dispense medical advice. Clinicians should use their own professional judgment in treating their patients