

Mesial Occlusal Restoration to Replace a Class I with Recurrent Caries

Patient Details

36 years old

Gender

Female

Initial situation of the patient

The patient noticed a brown spot on a molar, so she came for a control visit. No symptoms were referred.

Diagnosis

Clinically, a small carious lesion is visible on occlusal surface of 4.7. On the x-ray examination, a distal translucency was found on tooth 4.6. Marginal inflammation and plaque were present. No symptoms were referred by the patient.



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Before

Initial situation: a decayed groove on the occlusal surface of 4.7. The x-ray shows a distal radiotranslucency on 4.6.



After

Final situation 3 weeks after the fillings. Great comfort and no sensitivity at all were reported by the patient.



1. Initial situation: a decayed groove on the occlusal surface of 4.7. The x-ray shows a distal radiotranslucency on 4.6.

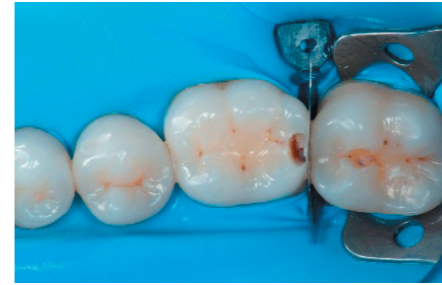


2. Final situation 3 weeks after the fillings. Great comfort and no sensitivity at all were reported by the patient.

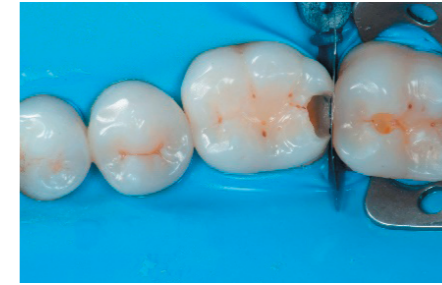
Clinical Workflow



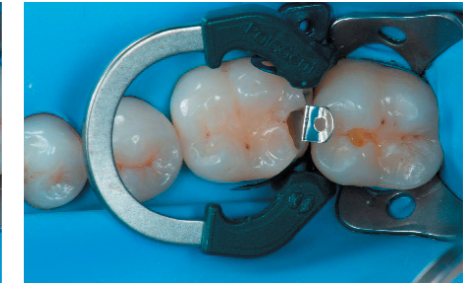
1. The situation after rubber dam isolation.



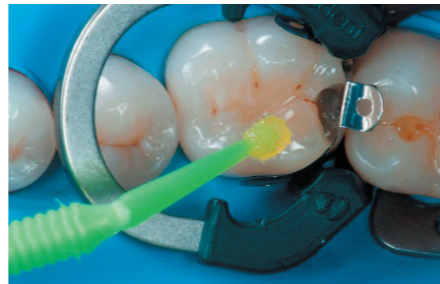
2. Initial cavity preparation, protecting the adjacent tooth with a Palodent³ WedgeGuard.



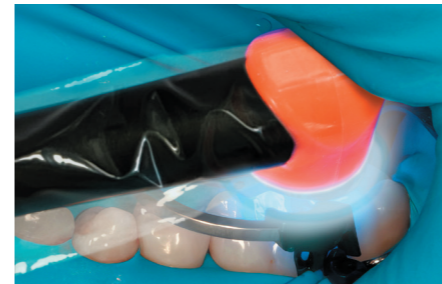
3. Class II cavity prepared.



4. The complete Palodent³ system in place: sectional matrix, wedge and ring.



5. Adhesive application with a universal adhesive, Prime&Bond².



6. Effective and fast light curing process with SmartLite[®] Pro Curing Light, after application of Prime&Bond².



7. A first thin amount (0.5 mm) of SDR[®] flow+ material is used as a low stress "adhesive protection layer".



8. Transformation of class II into class I, restoring the interproximal wall with Spectra ST¹ composite in Shade A2.



9. Transformation of a big class I into a small class I, using SDR[®] flow+ material in one increment up to 4mm.



10. Occlusal surface restored using Spectra ST¹ composite in shade A2.



12. Occlusal check.



12. Finishing with Enhance[®] Finishers.



13. 3 weeks control.

1 Depending on market location, Spectra ST composites are available as either TPH Spectra[®] ST, Ceram.x Spectra[®] ST, or Neo Spectra[®] ST
 2 Depending on market location, Prime&Bond adhesives are available as either Prime&Bond elect[®], Prime&Bond active[®], or Prime&Bond Universal[™]
 3 Palodent[®] Plus or Palodent[®] V3

Treatment plan

- Isolation
- Caries removal
- Matrix placement
- Adhesion
- Centripetal build-up technique
- Bulk restoration with SDR
- Occlusal restoration