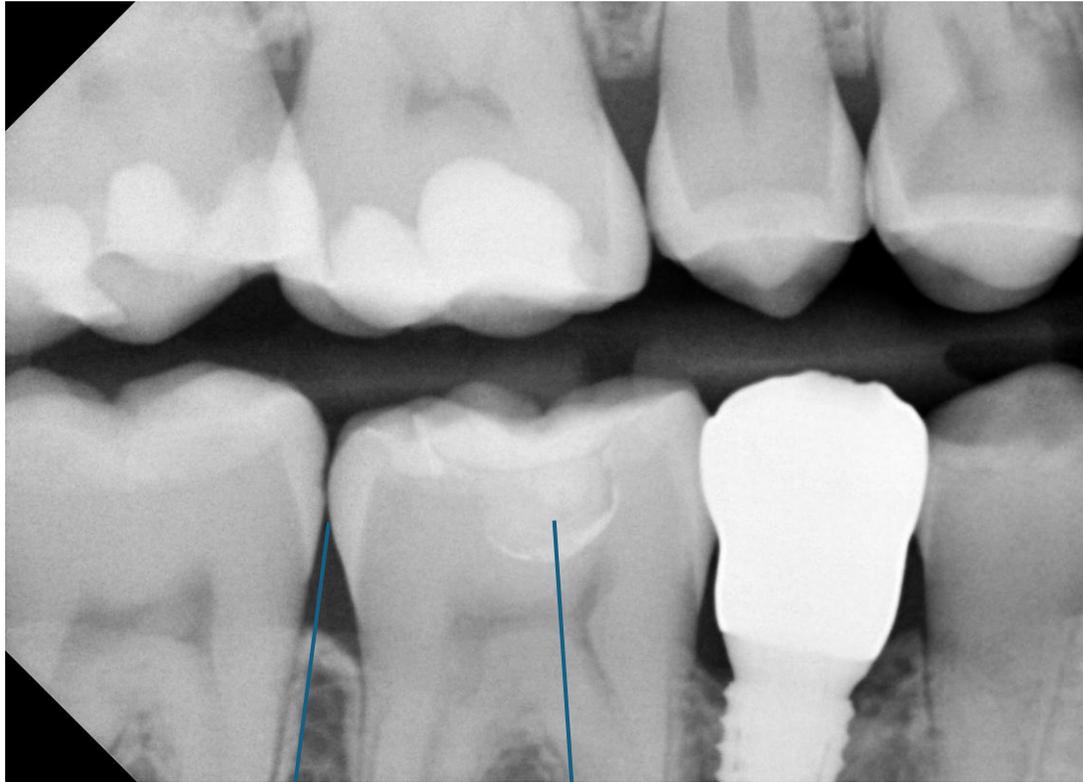


Case Presentation – Direct Restoration

Patient: S.I., female, 28 years old

Initial bitewing radiographs



Interdental caries

Occlusal filling



Initial situation



Occlusal view



Lingual view



Buccal view

Diagnosis, examination, treatment plan

- Reasons for patient's visit:
 - Noticed discoloration of the existing filling
 - Fraying of dental floss
- Clinical and radiographic examination:
 - Disto-occlusal carious filling on tooth 4.6
 - Mesio-occlusal carious filling on tooth 4.7
- Treatment plan:
 - Removal of the previous fillings and carious tissue
 - Tooth reconstruction and reestablishment of the contact point

Rubber dam isolation



Occlusal view

Interdental caries



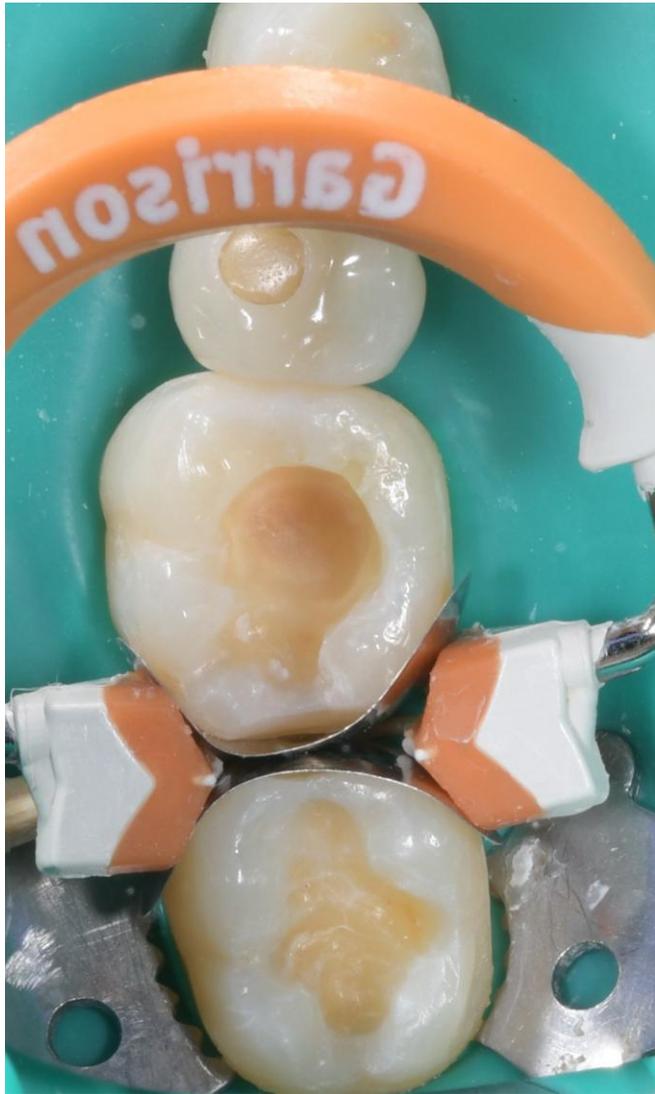
Lingual view



Aspect after caries removal



Caries removal using a high-speed handpiece



Placement of matrices, interdigital wedge, and Garrison ring



Reconstruction of proximal walls



Aspect after matrix removal –
transformation into Class I
cavities



Matrix removal



Aspect after composite layering

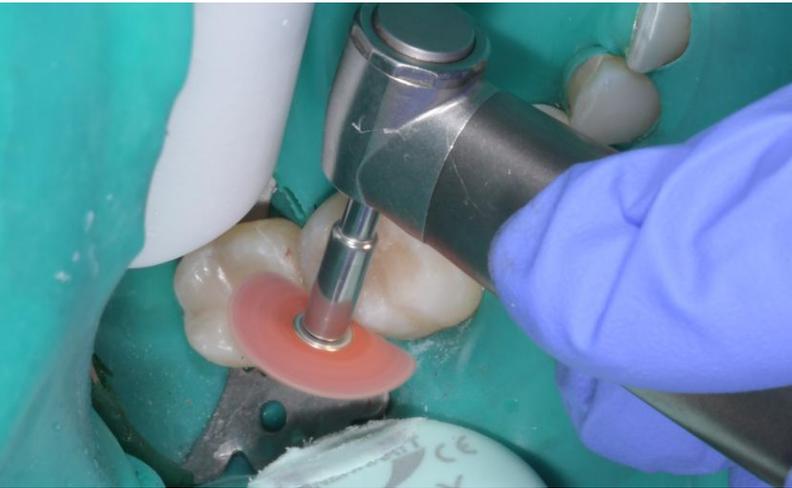


Cusp modeling





Removal of composite excess with surgical blade no. 12 and interproximal finishing using a metallic abrasive strip



Finishing of the restorations using polishing discs and rubber polishers attached to the contra-angle handpiece

Steps and materials used

- Anesthesia via Spix nerve block
- Rubber dam isolation (from 4.7 to 4.1 for improved visibility)
- Removal of carious processes using high-speed and contra-angle burs
- Placement of matrices, wedge, and Garrison ring
- Application of etching gel (Blue Etch), primer and adhesive (Optibond)
- Composite layering (Estelite Sigma Quick – Tokuyama) – initial Class I cavity restoration followed by cusp-by-cusp technique
- Removal of composite excess with surgical blade and metallic abrasive strip
- Finishing using discs and rubber polishers mounted on the contra-angle handpiece
- Occlusal adjustment – checked with Bausch 40 μ articulating paper



Final aspect



1-week follow-up



Before



After

3-month follow-up



Occlusal check



Aspect in maximum intercuspation (MI)

Thank you!