

Clinical Case Spotlight

Indirect “Single Visit” Onlay

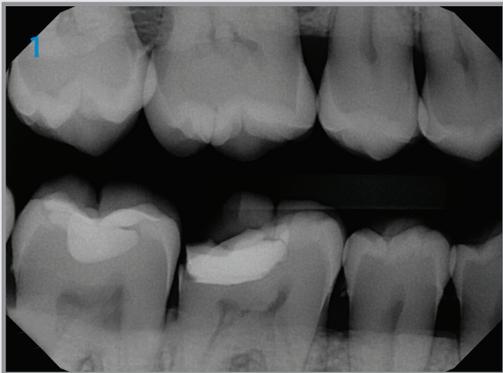
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Introduction to the case

This patient presented with a broken restoration on tooth 46 distal-occlusal aspect. The existing tooth restoration extended very deep and close to the pulpal chamber. Given the large size of the restoration, it was highly likely that if we simply replaced the restoration with another direct restoration, the result would be the same, with the restoration breaking under the occlusal loads the tooth and restoration are subjected to. So an indirect option was recommended for the tooth. As the mesial third of the tooth was largely unaffected with substantial sound tooth structure remaining, we could preserve it and be minimally invasive by restoring the tooth with an indirect restoration using the CEREC system.



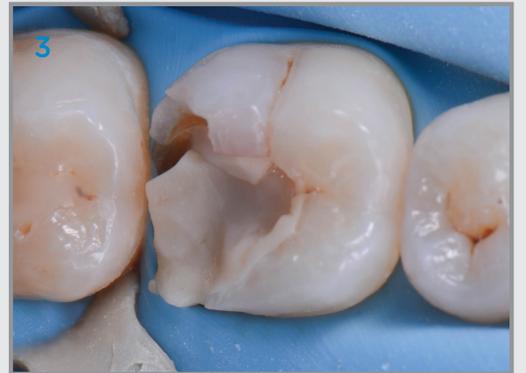
Treatment steps



1 Bitewing radiograph of tooth 46 showing the broken restoration on tooth 46, extending close to the pulp chamber.



2 Intra-oral appearance of the presenting tooth and broken restoration.



3 Tooth is isolated with a dental dam.



4 The old restoration is removed. The closeness to the pulp chamber can now be visualised.



5 A composite resin core is built to cover the deepest aspect of the dentine and the prep is completed. After removing the rubber dam, a retraction cord is placed to get a good scan, as some parts of the prep are subgingival.



6 The disto-buccal cusp is cut by 2mm to be overlaid. By placing a butt margin on the cusp, we can preserve more tooth structure and not compromise on the retention of the indirect restoration.



7 The tooth is isolated with rubber dam again to bond the restoration and sandblasted.



8 The onlay is cemented using some warmed composite resin.



9 The onlay blends in perfectly with the tooth, even with supragingival margin.

Material and Method

Restoration made using CEREC Omnicam with a Cerasmart Hybrid Ceramic CAD/CAM Block.

Discussion and Conclusion

The use of CEREC allows difficult indirect restorations to be tackled easily, with no need for provisionalisation or contamination of the dentine substrate as the treatment can be completed in a single visit, making things much more convenient for the patient and the clinician.

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