

A Modified “Re-bending of Dentsply Matrix Piece Pushing Gingival” Method to Restore the Adjacent Sub-Gingival Teeth Defect Targeting Special Population



Fengze wang^{1#}, Fangchong Du^{1#}, Jiao Wen^{2#}, Bo Qiao³, Rui Zhao³, Haifeng Meng⁴, Mingfang Shu⁵, Xun Chen^{*1}

¹Department of stomatology, The 316th Hospital of Chinese People's Liberation Army, China

²State Key Laboratory of Military Stomatology & National Clinical Research Center for Oral Diseases & Shaanxi Engineering Research Center for Dental Materials and Advanced Manufacture, Department of Anesthesiology, The Fourth Military Medical University, China

³Department of stomatology, Chinese People's Liberation Army General Hospital, China

⁴Department of stomatology, Binzhou people's hospital, China

⁵Binzhou Ling Hang dental hospital, China

Fengze Wang, Fangchong Du and Jiao Wen are contributed equally to the article

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*Corresponding author: Xun Chen, Department of stomatology, The316th Hospital of Chinese People's Liberation Army, No. A2 Niangniangfu, Xiangshan Road, Haidian District, Beijing, China

Abstract

Better adjacency is of significant importance to the function of teeth. The disruption of teeth adjacency would cause food impaction, dental caries and periodontal problems. Many cases, adjacent alveolar bone absorption result in food level impaction. Long-time food accumulation in gingival triangle zone can lead to teeth defect below the adjacent gingival. The bottom of the defect is difficult to see clearly, bringing great trouble of application of matrix system. Unreasonable placement of matrix piece will prone to appear resin overhanging, pressing the gingival. Hence, we summarized a modified “re-bending of Dentsply matrix piece pushing gingival” method to restore teeth defect below the adjacent gingival efficiently.

Introduction

Better contact relationship of teeth is crucial to the teeth function. The purpose of resin restoration is to re-form the adjacency of the teeth and to ensure no marginal overhang existence [1,2].

Often, the adjacent alveolar bone absorption will cause horizontal food impaction, which is the important reason to the teeth caries and periodontal disease below the adjacent gingival [3,4]. The big problem is that we are difficult to see clearly the bottom of defect.

Patients and Method

Rubber dam is the important tool to restore the teeth defect. However, there will be a limited population featured as restricted mouth opening, allergic to rubber dam and intolerance to long-time mouth opening. We couldn't apply rubber dam to these population. Hence, we create a modified “re-bending of Dentsply matrix piece pushing gingival” method to restore the defect more quickly. We re-bend the Dentsply matrix piece based on the shape of the defect area. Next, we apply the Dentsply matrix system to push the gingival to the subgingival defect section (Figures 1-3).

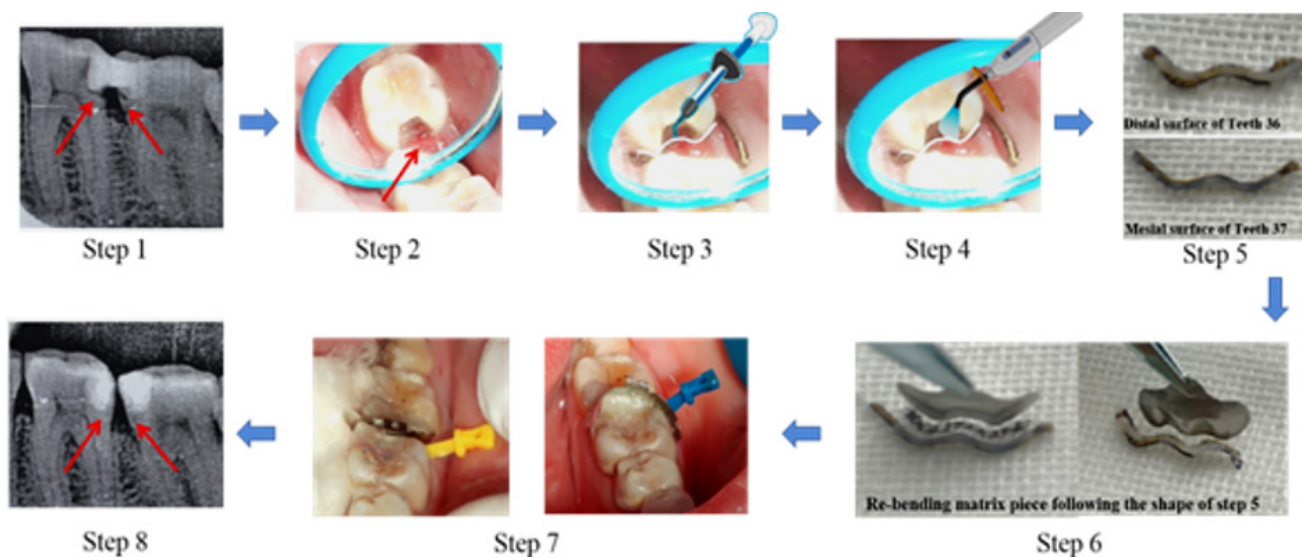


Figure 1: Re-bending matrix piece to push the gingival method.

- Step 1: Unproper resin restoration showing in the radiograph.
- Step 2: After removing the unproper resin restoration, the tooth defect area is covered by the gingiva.
- Step3: Inflamed gingival contraction using gingival retraction cord. Application of a layer of flowing resin to the gingival retraction cord.
- Step 4, 5: Application of curing light (Coltolux LED) to cure flowable resin. This will indirectly reflect the shape of the decay on the root surface below the gingiva.
- Step 6: Re-bending matrix piece following the shape of step 5.
- Step 7: Placement of re-bended matrix piece and restore the defect area using resin.
- Step 8: The radiograph after resin restoration. The results of the restoration are as expected.

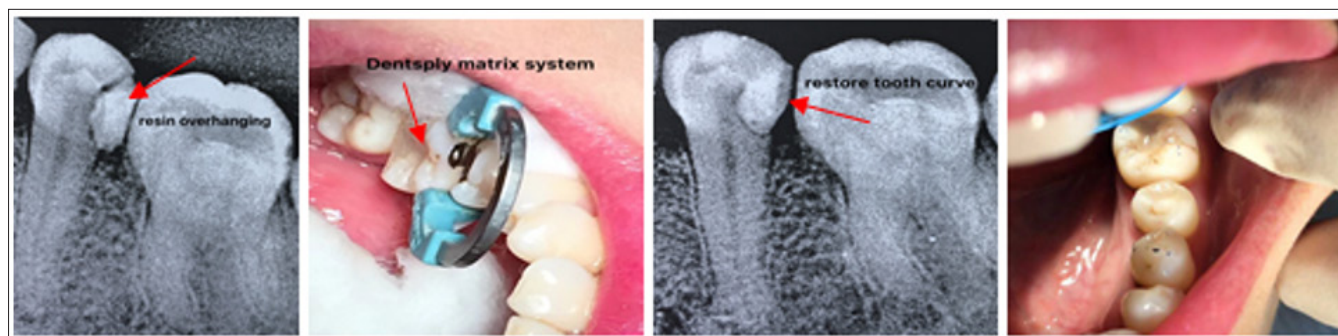


Figure 2: Restoring the distal subgingival tooth defect using Dentsply matrix system.

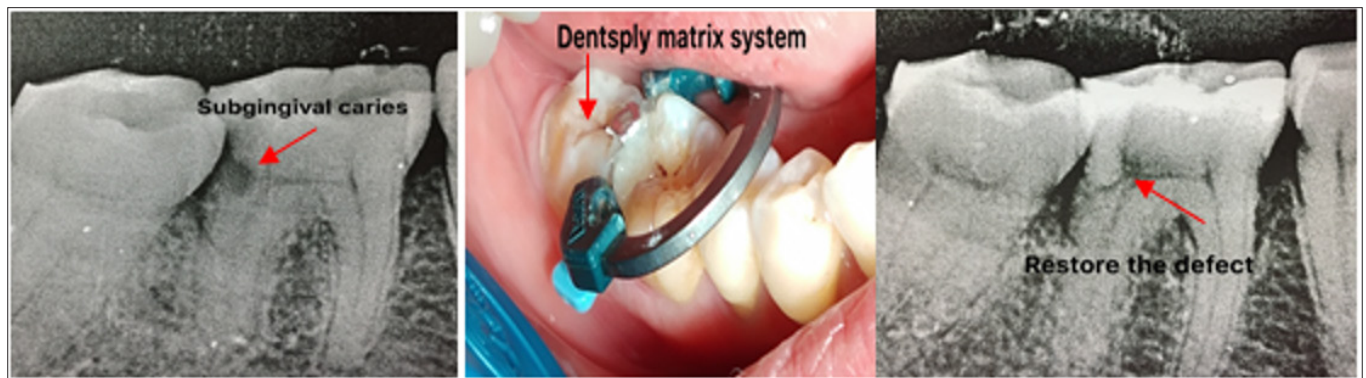


Figure 3: Restoring the distal subgingival tooth defect using Dentsply matrix system.

Conclusion

Repairing the subgingival teeth defect is a very difficult affair. This reformative method combined with Dentsply matrix system could assist doctors to restore the complicate caries relatively more easily. It could repair the subgingival tooth defect of special population better and faster.

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