



Three Easy Restoration Techniques for Dealing with Abfractions

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Introduction

Dental abfractions are notched-out areas on the root of a tooth at the gumline where the enamel and cementum of the tooth meet. While the tooth's hard enamel is not affected, the softer root experiences wear that eventually creates a slight notch or indentation. Possible causes include excessive force from vigorous brushing over an extended period of time, particularly if the toothbrush has hard bristles. The condition worsens over time. Fortunately, there are three relatively easy ways to restore the tooth.

Restoration Techniques

Technique 1:

An impression of tooth #4 that has an abfraction (Figure 1) is used to fabricate a provisional crown. The undercut in the crown is filled in with an add-on resin (LuxaFlow Ultra; DMG) (Figure 2), heat-cured and polished. The finished crown exhibits no abfraction.



Figure 1 Abfraction is apparent in Impression



Figure 2 After crown is fabricated, undercut in crowns is filled with LuxaFlow Ultra



Figure 3 Finished crown with no abfraction



Technique 2:

The undercut in the impression is filled in with an add-on resin (LuxaFlow Ultra; DMG) (Figure 4). After heat-curing the impression, the provisional crown is fabricated (Figure 5), trimmed and polished (Figure 6). The finished crown exhibits no abfraction.



Figure 4 Undercut in impression is filled in with LuxaFlow Ultra



Figure 5 Provisional crown exhibits no abfraction



Figure 6 Trimmed and polished provisional crown

Technique 3:

An impression is taken of the tooth that has an abfraction (Figure 7). The undercut is then cut out of the impression material (Figure 8), leaving the impression ready to receive the provisional crown and bridge material (Figure 9).



Figure 7 Impression with tooth #4 exhibiting an abfraction



Figure 8 Abfraction being cut out of the impression

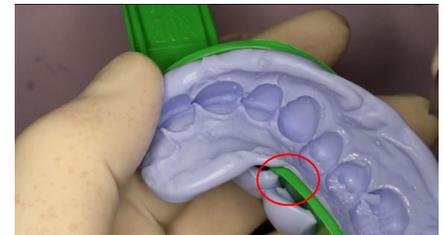


Figure 9 Impression with abfraction removed and ready receive provisional crown and bridge material

All three techniques easy to perform and result in functionally and aesthetically pleasing outcomes.