

Restoration of endodontically treated tooth using all-in-one resin crown

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I. Introduction

The tooth structure that remains after endodontic treatment has been undermined and weakened by all of the previous episodes of caries, fracture, tooth preparation, and restoration. The combined result of these changes is the common clinical finding of increased fracture susceptibility. Restorations for endodontically treated teeth are designed to protect the remaining tooth from fracture and to replace the missing tooth structure. Then it is available to reconstruct of crown portion using central retention cavity preparation of the entire pulp chamber and dentin bonding technology. This method provides reduced tooth loss, satisfactory adhesive retention and transmission of masticatory forces to the root.

The purpose of this case report is to present restoration using all-in-one resin crown in endodontically treated tooth.

II. Case Presentation

< Case I >

1. Sex/age: F/15
2. Chief Complaint: Tooth fracture of #11, 21
3. Present Illness: pain(+) / percussion(+) / cold(+) / hot(-) / mobility(-)
4. Impression: Unfavorable Crown fracture of #11, 21
5. Tx. Plan: 1. Endodontic treatment on #11, 21
2. Provisional restoration: all-in-one resin jacket crown

< Case II >

1. Sex/age: M/57
2. Chief Complaint: Sharp spontaneous pain of #14
3. Present Illness: sharp spontaneous pain(+) / percussion(-) / cold(++) / hot(-)
4. Impression: Acute pulpitis of #14
5. Tx. Plan: 1. Endodontic treatment on #14
2. All-in-one resin restoration

III. Conclusion

In endodontically treated teeth, all-in-one resin restoration is available method in low occlusal loading sites such as anterior teeth and premolars without excessive removal of tooth material and the using of post/core and crown separated.