

Treatment of fractured tooth through Surgical extrusion

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I. Introduction

Different treatment approaches are indicated for fractured teeth, depending on the location of the fracture. The tooth with complicated crown-root fracture or cervical fracture presents a lot of problems in respect of coronal restoration, especially when the fracture line extends below the marginal bone level. Orthodontic extrusion or surgical extrusion to save such teeth has been recommended. Although it is suggested that orthodontic forces render a more biological way of extruding the tooth, surgical extrusion is a one-step procedure which is simpler and less time-consuming than orthodontic extrusion of horizontal and oblique cervical root fractured teeth. In these cases, treatment of fractured tooth through surgical extrusion has to be considered at first.

II. Case Presentation

< Case I >

A 20-year-old male patient visited as a complaint of multiple crown fracture, and crown-root fracture on right maxillary second premolar was detected in periapical radiograph. Fracture line was extended to infra-alveolar level, so surgical extrusion was tried. The bucco-angulated replantation was then tried to confirm the margin of fractured tooth. Although crown-root ratio was unsuitable, good-healing status has been showed.

< Case II >

A 31-year-old female patient visited as a complaint of crown-root fracture on left maxillary central incisor. The tooth was already endodontically treated. Surgical extrusion technique was tried to save the tooth. Provisional resin crown was built-up for the patient's esthetic requirement at present.

III. Conclusion

Surgical extrusion is a good choice for saving the fractured tooth. This technique has many advantages such as reduction of the operative and treatment time, usefulness of successfully treating a periodontal involvement, easy treatment procedure. As for the good prognosis, proper case selection and minimal invasive treatments are necessary.