



Orthodontic extrusion of subgingivally fractured incisor : Case

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I. Introduction

This presentation aims to discuss methods that can adequately reproduce tooth shade by comparing and combining the various shade matching techniques available. Crown root fractures most often occur in maxillary central incisors due to trauma. Tooth fracture below the gingival attachment or alveolar bone crest presents restorative difficulties. Extrusion must not be the first choice of treatment for the fractured and extremely broken down permanent teeth in the anterior region and alternative treatment modalities must be considered. Orthodontic extrusion, surgical crown lengthening and surgical extrusion to save such teeth has been recommended. Surgical crown lengthening can be successfully used in the posterior region, where the esthetics is not a major concern. Surgical extrusion can be used in incisors, but it has a risk of fracture at extraction. Vertical forced eruption may be a suitable approach without risking the esthetic appearance and fracture.

The following case presents that anterior tooth subgingivally fractured was successfully treated with orthodontic extrusion.

II. Case Presentation

1. Sex/age: M/40
2. Chief Complaint(C.C): Crown fracture on right maxillary central incisor by falling down
3. Past Dental History(PDH): N/S
4. Present Illness(P.I): Crown and root fractures with pulp exposure of #11
Percussion(+), Mobility(+)
5. Impression: Complicated crown and root fracture on #11
6. Tx Plan:
 1. Endodontic treatment and orthodontic extrusion on #11
 2. Supplementary crown lengthening to expose the fractured margin of #11
 3. Restoration with fiber post and resin core
 4. Splinted PFG crowns on #11, 21

III. Conclusion

Orthodontic extrusion is considered the easiest orthodontic tooth movement that can produce excellent results with a good prognosis and a low risk of relapse. But, understanding the nature and magnitude of lateral shift is essential to controlling this movement for the satisfactory results.