Intentional Replantation Using 180-degree Rotation with Crown-Root Fracture: Case Report



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INTRODUCTION

Crown-root fractures comprise of 5% of dental injuries. The fracture involves the enamel, dentine, and cementum by originating in the crown, extending apically into the root and frequently exposing the pulp.

Intentional replantation with 180-degree rotation involves replanting the tooth back in the socket in a buccal-lingual reverse direction. This results in the tooth being positioned more coronally with the fractured surface more supragingival, enabling prosthetic dental treatment to be performed with greater access, and without violating the biological width.

METHOD OF TREATMENT









CASE

19-year-old male patient who fell from a height was diagnosed with crown-root fractures of #8 & #9.

Chief complaint: "I would like my smile back by saving these teeth, and I do not have much time as I will be travelling back to college in several weeks".























Crown delivery stage



2¹/₂ years follow-up



METHOD OF TREATMENT

Intentional replantation with a 180-degree rotation, splinting, root canal treatment, post and core build up, followed by extra-coronal restorations were performed to maintain the natural dentition.





CONCLUSION

- Through rotation and replantation, #8 & #9 subgingival palatal fractured surfaces rotate to become supragingival fractured buccal surfaces.
- The asymmetric root occupies a different ulletposition in the alveolus as the root apex does not reach the bottom of the socket.

- Greater access and isolation enabled the teeth \bullet to be treated more favorably, with sufficient space to accommodate the biological width.
- This technique enables the natural dentition and \bullet interdental papilla to be maintained.

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