

Intentional replantation of endodontically treated teeth

Jin-Kyung Lee*, Seong-Tae Hong, Kee-Yeon Kum

Department of Conservative Dentistry, School of Dentistry, Seoul National University, Seoul, Korea

I. Introduction

Intentional replantation is a technique in which a tooth is intentionally extracted and reinserted into its socket immediately after endodontic treatment and apical repair outside the oral cavity. This technique is indicated for teeth with anatomic limitations, accessibility problems, or persistent chronic pain and for patients who have cooperation problems or refuse to undergo periapical surgery.

Intentional replantation has some advantages over apical surgery, which include being an easier, less-invasive, less time-consuming, and less-costly procedure. On the other hand, it may be associated to root resorption, specifically replacement resorption (ankylosis).

Following case presents the use of intentional replantation for failed endodontic treatments.

II. Case Presentation

<Case I>

1. Sex/age: F/35

2. Chief Complaint(C.C): severe pain on left molar area

3. Past Dental History(PDH): previous endodontic treatment on #36, 37(4 Months ago)

4. Present Illness(P.I): #37: Per(++), Mob(-), Pal(+)

5. Impression: #37 acute apical periodontitis

6. Tx Plan: #37 Intentional replantation

<Case II>

1. Sex/age: M/36

2. Chief Complaint(C.C): pain on right 2nd molar

3. Past Dental History(PDH): #48 impacted 3rd molar extraction (1year ago)

4. Present Illness(P.I): #47: Per(+), Mob(-), EPT(-)

5. Impression: #47 pulp necrosis

6. Tx Plan: #47 endodontic treatment

7. Tx progress: #47 symptom sustained? Intentional replantation planned

III. Conclusion

With proper case selection, intentional replantation can provide good prognosis with less time and cost and should be more often considered as a viable treatment option to preserve the natural dentition, in situations where other procedures would likely fail.