

TREATMENT GUIDELINES FOR AVULSED PERMANENT TEETH

CLINICAL PRESENTATION	TOOTH ALREADY REPLANTED	TOOTH MAINTAINED IN PHYSIOLOGIC SOLUTION AND/OR DRY TIME < 60 MIN	TOOTH WITH > 60 MIN DRY TIME
TREATMENT	<ul style="list-style-type: none"> Cleanse injured area (water, chlorhexidine, or saline) Manage any gingival lacerations Confirm correct tooth position clinically & radiographically Place flexible splint (≤2 weeks) Rx: Systemic antibiotics Verify tetanus status Give post-treatment instructions CA: Begin RCT 7-10 days following replantation and prior to splint removal OA: Monitor for revascularization or necrosis 	<ul style="list-style-type: none"> CA: Cleanse root surface & apical foramen using saline while holding the crown of the tooth, then soak in saline OA: If contamination present, cleanse root surface & apical foramen using saline while holding the crown of the tooth OA: Apply topical antibiotic (<i>doxy or minocycline</i>) Provide local anesthetic CA: Rinse socket using saline Evaluate alveolar socket, repositioning displaced fragments OA: Clean clot from socket Replant tooth carefully with minimal pressure Manage any gingival lacerations Confirm correct tooth position clinically & radiographically Place flexible splint (≤2 weeks) Rx: Systemic antibiotics Verify tetanus status Give post-treatment instructions CA: Begin RCT 7-10 days following replantation and prior to splint removal OA: Monitor for revascularization or necrosis/resorption 	<ul style="list-style-type: none"> Carefully cleanse root of non-viable soft tissue with gauze CA: Begin RCT before replantation or 7-10 days following replantation OA: Begin RCT before replantation^{1,2} or 7-10 days following replantation¹ Prior to replanting: <ul style="list-style-type: none"> CA: Soak tooth for 20 min in 2% NaF to depress osseous resorption OA: Soak tooth for 20 min in 2% NaF to depress osseous resorption¹ Provide local anesthetic Rinse socket using saline Evaluate alveolar socket, repositioning displaced fragments Replant tooth carefully with minimal pressure Manage any gingival lacerations Confirm correct tooth position clinically & radiographically Place flexible splint (CA: ≤2 weeks² or 4 weeks¹; OA: 4 weeks^{1,2}) Rx: Systemic antibiotics Verify tetanus status Give post-treatment instructions If not initiated this appointment, begin RCT 7-10 days following replantation and prior to splint removal
ENDODONTIC CONSIDERATIONS	CA: When used, intracanal corticosteroid medicament (anti-clastic/anti-inflammatory) must be placed for ≥ 2 weeks at replantation visit or soon thereafter OA: Diagnosis of Pulp Necrosis following trauma necessitates ≥2 symptoms/signs; if necrosis occurs, necrotic pulp revascularization or apexification should be considered		Ultimate outcome: ankylosis, OA: resorption Consider decoronation if infraosition > 1mm (seen in ankylotic teeth of children and adolescents)
ANTIBIOTIC CONSIDERATIONS	Systemic: < 12 years old: 7 days of Amoxicillin; > 12 years old: 7 days of Doxycycline Tetanus status: physician referral is warranted to assure appropriate coverage if the tooth had contact with soil and/or tetanus status is unknown		
		OA: Topical antibiotic: Soak tooth for 5 minutes in solution of <i>doxycycline or minocycline (1mg mixed in 20ml saline)</i>	
POST-TREATMENT INSTRUCTIONS	For 2 weeks: no contact sports, eat a soft diet Use a soft toothbrush to clean teeth following every meal Twice daily, rinse with 0.12% chlorhexidine for 7 days Wear mouthguard when participating in contact sports		

GENERAL FOLLOW-UP CONSIDERATIONS

	CLOSED APEX WITH DRY TIME < 60 MIN	CLOSED APEX WITH DRY TIME > 60 MIN	ALL OPEN APEX AVULSED TEETH
7-10 Days	RCT with calcium hydroxide intracanal medicament (4 weeks max) if not performed previously		RCT teeth with > 60 min dry time if not done previously; all others, consider RCT or necrotic revascularization only when diagnosis is Pulp Necrosis
2 Weeks	Remove splint, clinical & radiographic evaluation	Remove splint ² (or at 4 weeks ¹), clinical & radiographic evaluation	Remove splint for teeth < 60 min dry time, clinical & radiographic evaluation
4 Weeks	Clinical & radiographic evaluation, root canal obturation		Remove splint for teeth > 60 min dry time, clinical & radiographic evaluation
3, 6, 12 Months, & Yearly For 5 Years	Clinical & radiographic evaluation		

CA: Closed Apex Tooth

OA: Open Apex Tooth

Italicized: optional, but recommended treatment

Where discrepancies exist between sources: **1** denotes recommendation by IADT and **2** denotes recommendation by AAE

This does not cover all situations and circumstances and differences between IADT and AAE guidelines but gives a general overview of considerations.