

## Emergency and Follow-Up Management of Other Dental Alveolar Injuries

	Concussion	Subluxation	Extrusion	Lateral Luxation	Intrusion
<b>Diagnosis/Clinical Findings</b>	Tooth tender to touch; no displacement; no mobility	Tooth tender to touch and mobile; bleeding from gums	Tooth partially protruding from bone/jaw	Tooth displaced axially from normal position; often tender to touch or mobile; possibly locked into bone (high metallic sound upon percussion)	Tooth is displaced deeper into the bone/jaw; high metallic sound upon percussion
<b>Radiographic/Clinical Assessment and Findings</b>	Radiographs; evaluate pulp chamber size and root development; sensitivity testing				
<b>Treatment</b>	Reposition into normal position; the tooth often must be extruded occlusally past the bony lock prior to repositioning; evaluate position with radiographs; flexible splint				
<b>Patient Instruction</b>	Slightly luxate with forceps; with <i>incomplete root formation</i> , allow for spontaneous reeruption; teeth with <i>complete root formation</i> , orthodontic or surgical repositioning				
<b>Up to 3 Weeks</b>	1. Soft diet; 2. Brush with soft toothbrush after each meal; 3. Rinse with 0.12% chlorhexidine every 12 hours for 1 week				
<b>Diagnosis/Clinical Findings</b>	Splint removal; clinical radiographic exam; sensitivity testing				
<b>Radiographic/Clinical Assessment and Findings</b>	Splint removal; in case of radiographic marginal breakdown, add 3-4 weeks to splint time; clinical and radiographic exam				
<b>Treatment</b>	Initiate root canal treatment in 1-3 weeks; splint removal except in teeth with open apices that erupt spontaneously				
<b>Patient Instruction</b>	Teeth and bone mobile				
	Crown Fracture	Complicated Fracture	Crown-Root Fracture	Root Fracture	Alveolar Fracture
<b>Diagnosis/Clinical Findings</b>	Enamel or enamel-dentin fracture	Enamel-dentin fracture; pulp exposed	Crown attached to gingival and mobile; pulp may or may not be exposed	Crown usually mobile and sometimes displaced	Teeth and bone mobile
<b>Radiographic/Clinical Assessment and Findings</b>	Radiographs; evaluate pulp chamber size and root development; sensitivity testing				
<b>Treatment</b>	Cover dentin; <i>a.</i> glass ionomer (temporary); <i>b.</i> composite resin; <i>c.</i> bond fragment; consider Ca(OH <sub>2</sub> ) if close to the pulp	<i>Immature tooth:</i> <i>a.</i> pulp capping; <i>b.</i> partial pulpotomy with Ca(OH <sub>2</sub> ); <i>c.</i> bacteria-tight coronal seal <i>Mature tooth:</i> <i>a.</i> pulp capping; <i>b.</i> partial pulpotomy with Ca(OH <sub>2</sub> ); <i>c.</i> bacteria-tight coronal seal; <i>d.</i> root canal treatment	<b>Emergency:</b> stabilize coronal fragment with acid etch/resin splint; <b>Definitive treatment:</b> expose subgingival fracture site by <i>a.</i> gingivectomy; <i>b.</i> orthodontic or surgical extrusion; <i>Immature tooth:</i> vital pulp therapy; <i>Mature tooth:</i> root canal therapy	Reposition coronal fragment; flexible splint, 3-4 weeks	Reposition fragment; splint 3-4 weeks
<b>Patient Instruction</b>	1. Soft diet; 2. Brush with soft toothbrush after each meal; 3. Rinse with 0.12% chlorhexidine every 12 hours for 1 week				
<b>3-4 Weeks</b>	Splint removal; clinical and radiographic exam; sensitivity testing				
<b>6-8 Weeks</b>	Clinical and radiographic exam, including sensitivity testing; further follow-up at 6 months, 1 year, and annually for 5 years				

# Emergency and Follow-Up Management of the Avulsed (Knocked-Out) Tooth

## 10 years of age or older-permanent teeth with closed apex

## Under 10 years of age-permanent teeth with open apex

	10 years of age or older-permanent teeth with closed apex			Under 10 years of age-permanent teeth with open apex		
<b>On-Site</b>	<p><b>Replant Tooth</b> Rinse gently to remove foreign objects from tooth</p> <p>Clean affected area with: a. water b. saline c. chlorhexidine Do not extract tooth</p>	<p><b>Unable to Replant Tooth</b> Place in transport media a. special storage media b. milk c. saline d. saliva Dry time less than 1 hour</p>	<p><b>Replant Tooth</b> Rinse gently to remove foreign objects from tooth</p> <p>Clean affected area with: a. water b. saline c. chlorhexidine Do not extract tooth</p>	<p><b>Unable to Replant Tooth</b> Transport media not used Dry time greater than 1 hour</p>	<p><b>Unable to Replant Tooth</b> Place in transport media a. special storage media b. milk c. saline d. saliva Dry time less than 1 hour</p>	<p><b>Unable to Replant Tooth</b> Transport media not used Dry time greater than 1 hour</p>
<b>Emergency Facility</b>	Suture gingival lacerations					
	Clinically and radiographically verify normal tooth position					
	Flexible splint					
	<p><b>Antibiotics</b> a. Penicillin-1000mg stat and 500mg every 6 hours for 7 days b. Doxycycline-100mg every 12 hours for 7 days for pts not susceptible to tetracycline staining</p>	<p><b>Antibiotics</b> (use appropriate doses for pt age and weight) Penicillin-every 6 hours for 7 days</p>				
	Tetanus booster as needed					
	1. Soft diet; 2. Brush with soft toothbrush after each meal; 3. Rinse with 0.12% chlorhexidine every 12 hours for 1 week					
<b>7-10 Days</b>	Remove pulp	Remove flexible splint				
	Place calcium hydroxide paste	If revascularization is a possibility, avoid endodontic treatment unless obvious signs of nonhealing are present; sensitivity may take 3 months to respond positively; if endodontic treatment is necessary, follow guidelines for teeth with closed apices until apexification is completed; obturate with gutta-percha				
<b>30 Days</b>	Obturate with gutta-percha if lamina dura intact; if root resorption present, replace Ca(OH) <sub>2</sub> - evaluate and change Ca(OH) <sub>2</sub> every 3 months; then obturate with gutta-percha if lamina dura intact					
<b>6 Months</b>	Clinical and radiographic exam (post-obturation)					
<b>1 Year</b>	Clinical and radiographic exam (follow-up for 5 years)					