Clinical Practice Procedures: Trauma/Tooth replantation

<table>
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<tr>
<th>Policy code</th>
<th>CPP_TR_TR_1016</th>
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<tr>
<td>Date</td>
<td>October, 2016</td>
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<td>Purpose</td>
<td>To ensure a consistent procedural approach to tooth replantation.</td>
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<td>Scope</td>
<td>Applies to Queensland Ambulance Service (QAS) clinical staff.</td>
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<td>Health care setting</td>
<td>Pre-hospital assessment and treatment.</td>
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<td>Population</td>
<td>Applies to all ages unless stated otherwise.</td>
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<td>Source of funding</td>
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Tooth replantation

Prioritising replantation of avulsed and grossly mobile luxated teeth nearing avulsion is associated with best possible long term prognosis and restoration of the landscape of the mouth. Replantation of a tooth with an out of socket dry-time > 60 minutes is futile because the periodontal ligament (PDL) cells are no longer viable.

If replantation is not possible, the tooth/teeth is to be stored in an appropriate transportation medium (normal saline 0.9%, milk or saliva (inside patient’s lip or cheek) and transported with the patient to an appropriate health facility.

**Indications**

- Permanent (adult) tooth that is:
  - Avulsed tooth; OR
  - Grossly mobile luxated tooth nearing avulsion.

**Contraindications**

- Prioritisation of other traumatic injuries
- Primary (baby) tooth
- Out of socket time > 60 minutes
- Distressed patient
- Compromised integrity of the avulsed tooth or supporting tissues (obvious deformity, decay)
- Compromising medical condition (immunocompromised, severe congenital cardiac abnormalities, severe uncontrolled seizure disorders, severe mental disability, severe uncontrolled diabetes)

**Complications**

- Haemorrhage
- Pain
- Rejection
- Tooth fusion to the bone
Procedure – Tooth replantation

1. Explain the procedure to the patient.
2. Keep the patient calm.
3. Always hold the tooth by the crown (white part), avoid touching the root.
4. If the tooth is dirty, rinse briefly (maximum 10 seconds) with cold running water.
5. Replace the clean tooth in the socket immediately, using the other teeth as a guide by:
   - Holding the crown between your thumb and first finger
   - Ensure the smooth, flat surface is facing forward
   - Anchor your non-dominant hand on the patient's head or jaw, then push firmly
6. Sustained pressure is required to move blood that has accumulated in the socket.
7. Stabilise the replanted tooth by:
   - biting down on sterile gauze
   - holding the tooth in place with finger pressure
8. Transport while maintaining appropriate analgesia

Additional information
- Alignment can be adjusted by a dentist during splinting of the injured site.
- Paracetamol is the recommended analgesia for traumatic dental injuries.