

AVULSED OR KNOCKED OUT TOOTH

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What is tooth avulsion ?

Partial or complete displacement of a tooth from its socket / bony socket due to trauma.

This is one of the most serious **dental emergency**. Quicker you act, more chances for the tooth to be saved. In children avulsion injuries occur as a result of fall while playing. But in adolescence & adults avulsion occurs during sports, road traffic accidents & violence. Most common avulsed teeth are central Incisors. The most common complication of avulsion is necrosis of periodontal ligament & damage to cementum thus leading to root resorption or ankylosis of replanted tooth.

What you can do?

Its essential to reach your dentist as early as possible that is within half an hour to two hrs (longer the tooth is out of mouth, more chances of dehydration & death of cells of avulsed tooth)

In meantime what you should do -

- Pick the tooth with upper portion (crown) of the tooth. **Do not touch the root portion.**
- If tooth is dirty, rinse the tooth with clean water keeping in mind the vitality of the root surface & viability of supporting structure (periodontal ligament) of tooth. **Do not scrub the root surface**
- One option is that either the patient put the tooth back in to its socket himself/herself or keep it between cheeks & gums or under the tongue.
- Another option is that patient can keep his/her tooth in a storage medium like milk, saliva in a container or last & least effective water.
- Quickly reach to your dentist as fast as possible. **Try to reach within half an hour.**

First aid knowledge about this should be spread to parents, friends, school teachers, sports coaches, students, traffic policemen, first aid volunteers and general medical practitioners.

What your dentist will do?

As you will reach to your dentist. He/she will examine the tooth & socket thoroughly. If all the factors responsible for the success of replantation are favourable, the success of the replanted tooth depends on Extra alveolar dry time (EADT), Total extra alveolar time (TEAT), bacterial contamination & damage to root surface and stage of root formation.

Role of Dentist

1. If TEAT is less than one hour
 - Rinse the tooth with normal saline
 - Give local anaesthesia
 - Examine the socket, if labial cortical plate has

collapsed inward, dilate with periosteal elevator

- Irrigate the socket with normal saline or betadine to remove any foreign body
- Put the tooth gently but firmly into socket after cleaning the tooth.
- Tooth may be splinted with functional splint like plastic resin or by wiring the adjacent teeth.
- Make the tooth out of occlusion
- Leave the splint in place for 7-10 days or as told by your dentist.
- **Do not try to move the splinted teeth & never bite with them.**
- Regularly go to your dentist for observation of proper reattachment.

He/She may suggest further treatment such as RCT after one week. Tooth may begin to dark or weaken or break so regular visit is must. Endodontic treatment is different for 'open apex' & 'closed apex' cases

In case of open apex

Open the root canal, clean it, pack it with non setting Calcium Hydroxide, replace the dressing after two months till apical barrier is formed (It may take 3 months to 24 months). Obsolete the canal with gutta percha.

In case of closed apex -

Open the canal, clean it, give intracanal dressing of calcium hydroxide. After two weeks obsolete with gutta percha

2. If TEAT is more than one hour

- Initial procedure is same
- The root canal procedure is done prior to putting avulsed tooth into the socket.
- Tooth is splinted for 4-6 weeks

Patient must consult the physician for adjunctive drug therapy such as Tetanus consultation or Antibiotics etc.

CONCLUSION -

Time factor is very important in replanting the avulsed tooth. The prognosis of the treatment can not be predicted completely. It can result into root resorption or root ankylosis. The patient or the guardian should be made aware of the prognosis.

