

# Management and Treatment of **Tooth Trauma**



# Tooth trauma:

is the injury to
the tooth that may
occur as a result of
falls, collisions, fights,
biting hard objects,
sports injuries or traffic
road accidents. The
upper front teeth are
most frequently
affected by trauma.



# General Care Instructions

- Contact the Emergency Services immediately in case of head or neck injury, loss of consciousness, uncontrolled bleeding, inability to open/ close the mouth, suspected fracture of facial bones, big swelling in mouth or throat or breathing difficulty.
- Minimize anxiety of the traumatized person and control minor bleeding by applying firm pressure on the area.
- Chest X ray should be taken if the person with tooth trauma experiences breathing difficulty to see if broken/ missing tooth is aspirated into the respiratory tract.
- Further management and treatment of tooth trauma depends on type of tooth injured (milk/permanent tooth) and severity of injury.



# Prevention of tooth trauma

- Do not use teeth to bite on hard objects like pencil, pen etc. or to open bottle caps.
- Supervise young children when they are learning to walk and play.
- Safety measures to prevent falls. Take extra care especially in staircase, near swimming pools, wet floor, bathroom, bathtub etc.
- Avoid falls during activities like cycling, using skateboard, roller skates etc.
- Always use protective helmets with face guard and seat belts while travelling in vehicles.
- People with forward placed upper front teeth are more like to suffer tooth trauma during falls.
   They should take care to avoid falls and seek orthodontic treatment to correct the tooth position.
- Use mouth guard for contact sports like boxing, basketball, volleyball, football, rugby etc.

# **Mouthguards**

They help to prevent tooth trauma by absorbing and spreading the impact of the contact force. There are several types of mouthguards that either over the counter, Boil and Bite mouth guards, and Custom fit mouth guards.



# **General First Aid Instructions:**

- Rinse the mouth with cold water
- Apply cold compress to reduce swelling
- Control bleeding

# Important instructions for oral care after tooth trauma:

- Maintain good oral hygiene
- Brush with soft bristles toothbrush.
- Use Chlorhexidine mouthwash twice a day
- Adherence to Soft diet for few days

# Milk Tooth Trauma

This occurs most often when the toddler is learning to walk or in young children due to injury while playing and may appear as follows:

# Tooth Knock out



- Tooth is completely out of its place.
- Never reposition or replant the knocked-out milk tooth, as it can cause irreversible damage to the developing permanent tooth that is growing inside the bone.
- · No dental treatment is required.
- Follow up with dentists regularly till the eruption of the permanent tooth.

# Tooth Pushed in



- · Visit the dentist immediately.
- An X-ray will be taken.
- If milk tooth is only slightly pushed in, it does not require any treatment as tooth will spontaneously reposition on its own.
- If the milk tooth is displaced deep, close to the developing permanent tooth, it has to be removed.

# Loose Tooth



- Tooth may be loose and displaced from its position.
- Visit the dentist immediately. It may require either simple follow up assessments or dental treatment to reposition and stabilize the tooth, followed by Root Canal Treatment if internal structures are damaged or infected.
- Extremely loose tooth will be removed by the dentist to prevent risk of accidental swallowing or aspiration.

# Tooth Discoloration



- Tooth may gradually turn grey or black a few days after trauma.
- In some children the discoloration fades over a period of few weeks or months and the tooth regains its original color.
- In most children such teeth will not cause any problem and fall out naturally.
- But if the child develops pain, fever, gum swelling or pus discharge around the tooth consult the dentist immediately.

### **Broken Tooth**



• Tooth may be loose and displaced from its position.

 Visit the dentist immediately. It may require either simple follow up assessments or dental treatment to reposition and stabilize the tooth, followed by Root Canal Treatment if internal structures are damaged or infected.

 Extremely loose tooth will be removed by the dentist to prevent risk of accidental

swallowing or aspiration.

# **Chipped Tooth.**



• Small part of tooth is fractured or broken.

 Rinse the mouth and make sure there are no tooth pieces embedded in lips, tongue or gums.

 Visit the dentist to smoothen the sharp or ragged tooth edges, which may

injure the lips or tongue.

 The lost tooth structure can be rebuilt by the dentist using tooth colored filling materials.



## **Permanent Tooth Trauma**

In most of the children, permanent teeth begin to erupt and replace front milk teeth by the age of -6 7 years. They can easily be differentiated from milk teeth as they are bigger in size compared to milk teeth.

- Permanent tooth that is chipped, broken or loose due to trauma is managed and treated similar to milk tooth trauma.
- Tooth pushed in and Knocked out completely require distinct care and management.

# For a tooth that is completely knocked out,

prompt action will save the natural tooth. Repositioning it within 60 minutes increase the chances of its survival.

### First Aid for Knocked Out tooth:

• Always handle the tooth by its crown (white part). Never touch the root half of the tooth (yellow/brown part), which contains living cells needed for healing.



**ROOT - Do Not Touch** 

CROWN - Ok to Touch



• If the tooth is visibly dirty rinse it with cold running water before repositioning it. Never scrub the root part.

 Put the tooth back in its natural place and bite on a handkerchief to hold it in place till they visit the dentist.

• If the person is unable to reposition the tooth in the mouth, it has to be stored in a proper manner to keep the cells alive.

### The tooth can be placed in any of the following:

- Glass of milk
- Glass of Saline
- Tooth placed in the person's mouth, keeping it inside the lip or cheek so that it is moistened with saliva.

Avoid placing the tooth in water.

And seek immediate dental treatment.

In the dental clinic, the dentist will stabilize the tooth with splint and later perform Root Canal Treatment.

**Note:** If the knocked out tooth was left dry outside the mouth for more than 60 minutes or if the cells on root surface are dead or damaged, the tooth has lower chances of long-term survival after repositioning.



# If the tooth is only slightly pushed in

it will appear shorter compared to adjacent teeth.

In most cases, this does not require any treatment, as the tooth will reposition on its own.

- If the trauma is very severe, permanent tooth may be pushed in so deeply that it appears to be missing. The tooth in such cases may get locked in the underlying bone and require surgery or orthodontic treatment to reposition it.
- The pushed in tooth after repositioning should be followed-up with splinting to stabilize it in its new position.
- The pushed in tooth should be followed-up with splinting to stabilize it in its original position.
- Sometimes, internal nerves and blood vessels of the tooth may be damaged due to the impact of trauma, and Root Canal Treatment of the tooth will be performed by the dentist.

# Tooth discoloration



# Tooth may gradually turn grey or black a few days after trauma.

- It is a sign that tooth is not receiving adequate blood flow
- Discoloration of front tooth is adults, affects their appearance and is an important esthetic concern.
- Depending on the extent of tooth trauma, the treatment may involve Root Canal Treatment, Professional whitening/ bleaching of the tooth or cosmetic treatment with cap/ crown or veneer.