

# Tackling Day To Day “Orthodontic Emergencies” By General Dentist

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An Orthodontist is capable of bringing an alteration in tooth position, skeletal pattern involving jawbones. Referral to an orthodontic clinic is relatively rare in an Indian set up as most orthodontist works as consultant in dental clinics.

Once the course of orthodontic treatment begins which extend upto 2 years on an average, many situation arise as emergencies during the course of treatment which have to be faced by the general dentist as the orthodontist visits the clinic mostly once / twice a month.

The first step is to identify the areas of concern and subsequently how to deal with them. Therefore, there is a great need for the general dentist to understand the nature of the orthodontic emergency and deal with them and give proper instruction to the patients.

There are commonly associated orthodontic emergency and the detailed procedure to tackle them.

## List of Orthodontic Emergencies mostly encountered :

- (1) Pain due to activation of appliance
- (2) Over-extended wire
- (3) Loose orthodontic bands
- (4) Removal of loose brackets from arch wire
- (5) Loose wire
- (6) Bleeding gums
- (7) Oral ulcers
- (8) Partially deboned “Fixed lingual retainer”
- (9) Premature removal of separator

### 1. Pain :

The main causes of pain can be

- (1) Pressure exerted by separators
- (2) Activation of fixed orthodontic/ orthopedic appliances.
- (3) Over activated removable appliance

### Management

(a) **Prior information and reassurance** to the patient is very important. In case of separators, patients should be told that they would be removed in 2-3 days. In case of fixed appliance, it should be informed that force would decrease with time and so will the pain.

(b) **Medication** like NSAIDS should be considered after checking the medical history of the patient.

### 2. Treatment of over-extended wire from buccal tube

It is one of the most common problem that causes ulceration of buccal mucosa and pain and discomfort to the patient.

### Treatment by dentist :

(a) **Cut the over-extended wire :** (i) By a distal-end cutter - Don't use any other wire cutter or else the wire ends can lodge into soft tissues or throat which could be life threatening. (ii) Using airtor or micro-motor hand piece it is used in case of non availability of distal-end cutter

**Instruction to the patient :** In case of non availability of patient or doctor

(i) Use of orthodontic relief wax to be placed on the overextended wire. (ii) If it is not available, take a piece of chewed gum and place it on the wire.

**Medications:** (As applicable in ulcers due to orthodontic appliance.)

### 3. Loose Orthodontic bands

Loose bands are difficult to remove as they are firmly attached with arch wire. They are a cause of great discomfort to the patient as they interfere while biting. Food lodgment also leads to bleeding gums, pain, swelling, halitosis and caries.

### Management

(i) Place the tip of curved probe and lift the band occlusally as much as possible. (ii) Clean the inner surface of molar band using 3-way syringe and curved probe so that all food debris and loose cement is removed. (iii) Clean the tooth surface and remove the attached cement using straight/curved probe. (iv) Then air-dry the tooth surface, inner surface of the band and isolate the area. (v) Mix GIC Luting cement and apply on the inner surface of band and tooth

surface. (vi) Push back the band in its place as done while luting the crown in FPD. (vii) Take out excess cement, recheck the bite and give instructions as after cementation of crown / bridge.

### 4. Removal of loose brackets from arch wire

Loose orthodontic brackets are generally moving in arch wire and cause of pain and discomfort to the patient.

### Management

(a) Stabilize the Bracket against the tooth so that it does not move while cutting the module/ligature surrounding the bracket.

(b) Cut the module with sharp suture cutting scissors.

(c) In case bracket is secured with a ligature wire, use an airtor / micro-motor hand piece.

(d) Place curved probe below the arch wire & gently lift it to create space between bracket and tooth.

(e) Now remove the bracket with the help of tweezers.

### 5. Removal of loose wire

If wire has come out of buccal tube, it can pierce the oral tissues causing ulceration and pain to the patient.

### Management

(i) Use universal plier /artery forceps and place it back in the buccal tube. (ii) If not possible, hold the loose end of the wire with artery forceps/needle holder and with the other hand; use an airtor micro-motor handpiece to cut the wire to flush against the adjacent brackets. (iii) For treatment of Ulcers/laceration caused due to loose wire, refer to section of oral ulcers.

### 6. Bleeding gums

Patients may report of bleeding gum, swelling due to gingival inflammation and halitosis.

### Management

(a) Proper oral prophylaxis to be done immediately.

(b) Periodic check of oral hygiene.

(c) Patient should be instructed to use orthodontic brush, mouth wash and gum astringent regularly.

### 7. Oral ulcers

It occurs due to impingement of orthodontic appliance like hooks, loose wire, brackets, and overextended wire

### Management

(a) Removal of irritants as discussed individually

(b) Medication- any anesthetic topical ointment like mucopain, dologel, Orasore (oraguard) can be used

(c) In case of non-availability of doctor, orthodontic relief wax can be used. Patient can stick a part of chewing gum and place it on the irritating area if patient does not have relief wax.

### 8. Partially deboned “fixed lingual retainer”

### Management

(a) Remove the composite from the teeth where wire has come off. Clean the area, isolate, etch and bond, then adapt the loose end of the wire to the tooth. After that use composite to re-bond the wire to the tooth.

(b) Re-check the wire for interferences and polish the rough edges.

### 9. Premature dislodgement of separators :-

Dislodgement of separators is a common problem. General dentist should have spare elastic separators so that they can place a separator if needed.

### Management

(a) Insert 3-4 inch lengths of floss through the elastic separators.

(b) Stretch it on both sides and insert it through the mesial/distal end of tooth where separator has come off.

### Conclusion

All these procedures suffice the emergency measures to be taken by the general dentist in the absence of an Orthodontist. In all times orthodontist should be consulted and due advice to be taken. There are no standardized text book procedures available for general dentists, to deal with orthodontic emergencies. The above procedure are evolved on the basis of practical experience of orthodontists and can be extremely helpful to general dentist.