

# Handling Orthodontic Emergencies

## TOOLS & SUPPLIES

- Non-medicated orthodontic relief wax
- Dental floss
- Sterile tweezers
- Small, sharp clipper
- Q-tips
- Salt
- Interproximal brush
- Toothpicks
- Topical Anesthetic (such as Orabase or Ora-Gel)

## A. Ligature

The archwire is held to each bracket with a ligature, which can be either a tiny elastic or a twisted wire.

## B. Archwire

The archwire is tied to all of the brackets and creates force to move teeth into proper alignment.

## C. Brackets

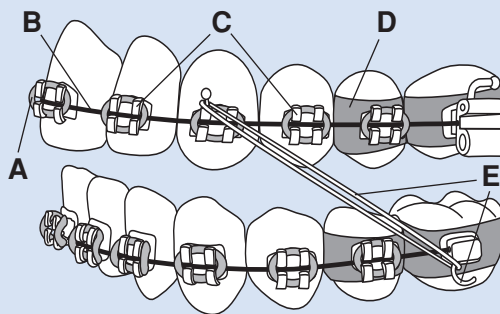
Brackets are connected to the bands, or directly bonded on the teeth, and hold the archwire in place.

## D. Metal Band

The band is the cemented ring of metal which wraps around the tooth.

## E. Elastic Hooks & Rubber Bands

Elastic hooks are used for the attachment of rubber bands, which help move teeth toward their final position.



## EMERGENCY TREATMENTS

The following orthodontic emergencies and their treatments are listed in the order of the least severe to the most severe. Only the most severe emergencies may require immediate attention by an orthodontist. The majority of these are easily treated with a follow-up by the patient's orthodontist.

### Food Caught Between Teeth



This is not an emergency, but can be a little uncomfortable or embarrassing for the braces-wearing patient. It is easily fixed with a piece of dental floss. Try tying a small knot in the middle of the floss to help remove the food, or use an interproximal brush or toothpick to dislodge food caught between teeth and braces.

### Ligatures Come Off



Tiny rubber bands or small, fine wires, known as ligatures, hold the wire to the bracket. If a rubber ligature should come off, you may be able to put it back in place using sterile tweezers. If a wire ligature comes loose, simply remove it with sterile tweezers. If the wire ligature is sticking out into the lip but is not loose, it may be bent back down with a Q-tip or pencil eraser to eliminate the irritation.

Of course, when one ligature pops off or breaks, others may follow. Be sure to examine all ligatures. Missing or broken ligatures should be brought to the attention of the patient's parent/guardian, who should then inform the orthodontist. If a rubber or wire ligature is lost, notify the parent/guardian so that the orthodontist may advise whether the patient should be seen.

### Discomfort

It's normal for a patient to have discomfort for a day or two after braces or retainers are adjusted. But it can make eating uncomfortable. Reassure the patient that the discomfort is both normal and temporary. Encourage soft foods. Have the patient rinse the mouth with warm salt water.

### Mouth Sores



Some patients are susceptible to episodes of mouth sores. While braces do not cause them, they may be precipitated or exacerbated by an irritation from braces. One or several areas of ulceration of the cheeks, lips or tongue may appear. This is not an emergency, but may be very uncomfortable for the patient. Prompt relief may be achieved by applying a small amount of topical anesthetic (such as Orabase or Ora-Gel) directly to the ulcerated surface using a cotton swab. Instruct the patient to reapply as needed.

### Irritation of Lips or Cheeks



Sometimes new braces can be irritating to the mouth, especially when the patient is eating. A small amount of non-medicinal relief wax makes an excellent buffer between metal and mouth. Simply pinch off a small piece and roll it into a ball the size of a small pea. Flatten the ball and place it completely over the area of the braces causing irritation. The patient may then eat more comfortably. Let the patient know that if the wax is accidentally ingested, it's not a problem. The wax is harmless.

### Protruding Wire



Occasionally, the end of a wire will work itself out of place and irritate the patient's mouth. Use a Q-tip or pencil eraser to push the wire so that it is flat against the tooth. If the wire cannot be moved into a comfortable position, cover it with relief wax. (See *Irritation of Lips or Cheeks* above for instructions on applying relief wax.) The patient's parent/guardian will need to make the orthodontist aware of the problem.

In a situation where the wire is extremely bothersome and the patient will not be able to

see the orthodontist anytime soon, you may, as a last resort, clip the wire.

Reduce the possibility of the patient swallowing the snapped piece of wire by using folded tissue or gauze around the area. Use a pair of sharp clippers and snip off the protruding wire. Relief wax may still be necessary to provide comfort to the irritated area.

### Loose Brackets, Wires or Bands



If the braces have come loose in any way, the parent/guardian needs to be notified, and they should call the orthodontist to determine appropriate next steps.

Brackets are the parts of braces attached to teeth with a special adhesive. They are generally positioned in the center of each tooth. The bracket can be knocked off if the patient has eaten one of those hard or crunchy foods orthodontic patients are instructed to avoid, or if the mouth is struck while at play. (Encourage all patients, especially those with braces, to wear a protective mouth guard while playing sports.)

If the bracket is off center, the adhesive may have failed. Call the parent/guardian, and recommend that they immediately notify the orthodontist, who will determine the course of action.

If the loose bracket has rotated on the wire and is sticking out and the patient cannot immediately be taken to the orthodontist, you can do a temporary fix to alleviate discomfort and prevent further damage. But take care to prevent swallowing or other injury.

To put the bracket back in place, use sterile tweezers to slide the bracket along the wire until it is between two teeth. Rotate the bracket back to the proper position, then slide it back to the center of the tooth.

### Piece of Appliance is Swallowed

This is rare, but when it does happen, it can be fairly alarming to the patient. Encourage your patient to remain calm. If the patient is coughing excessively or having difficulty breathing, the piece could have been aspirated.

If you are able to see the piece, you may carefully attempt to remove it. But do not make the attempt if you could cause harm.

If appropriate under the circumstances, examine the patient's braces for problems that may result from the missing piece, such as looseness or irritation, and treat as specified above.

If you are unable to see the piece and believe it may have been aspirated, notify the parent/guardian and the orthodontist immediately.