

The Quad Helix Expander

Purpose

The purpose of the quad helix (QH) is to stimulate the upper teeth and jaw to grow wider. This creates more room for the permanent teeth and shapes the dental arch to more closely match the patient's facial form.

Initial Adjustment Time

The device is not removable and the patient will not need to adjust it. Since it fits behind the teeth, it is not very visible. Most patients require between 3-5 days to become adjusted to the QH device. After this time, most patients forget the appliance is in their mouth. Some patients also notice a change in their speech during the initial adjustment period. If the patient will speak slowly, speech will improve within a short period of time.

Although the QH works slowly and gently, some discomfort can be expected. Ibuprofen (i.e. Advil, Motrin), Tylenol, or similar analgesics will be all that is necessary. Ibuprofen typically works best in situation. It is an excellent idea to take the proper dose of medication before discomfort starts. Many patients acquire a habit of pressing their tongue against the QH wire. While this is not harmful, this will make a groove in the tongue and may make the tongue sore.

Care of the Quad Helix

Patients must not play with the wire or pick at it. Hard, sticky or brittle foods such as Jolly Ranchers, Gummy Bears, Now & Laters, Skittles, Taffy or ice will destroy the wire resulting in discomfort and added expense. These types of things must *not* be put in the patient's mouth at all. Carrots, apples, steak, pizza, or similar foods should be cut into small pieces before being chewed. Teeth should be brushed and flossed in the usual manner.

Appointments

In order to fit exactly, each quad helix is custom made. This requires 3 separate appointments:

1. Placement of the Separators/Spacers – This takes about 10 minutes. These spacers create enough space around each tooth for the placement of orthodontic bands. The spacers may make teeth tender. Ibuprofen or Tylenol would be recommended, and should be taken before discomfort starts. The next visit will be scheduled in 3-5 days.
2. Impressions and fitting of orthodontic bands – This appointment takes about 30 minutes. From the model of the patient's teeth, the QH will be custom made and soldered to the orthodontic bands.
3. Placement of the Quad Helix – This procedure also takes approximately 30 minutes. It is best to take the proper dose of Ibuprofen or Tylenol before the placement of the QH.

For some patients, an upper and lower expander will be used. Most often, the upper expander (QH) will be placed first. The lower device (if needed) will be placed after upper expansion is underway, and after the patient has had enough time to become completely comfortable with the QH.

If you have questions or concerns, please discuss them with Dr. Fales. The office phone number is 913-782-2207.