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Information About the Rapid Palatal Expander (RPE)

The Purpose of the RPE

An RPE (rapid palatal expander) is used to widen the upper jaw and palate. It is a custom appliance which is usually cemented to the upper molars, but may be attached to other teeth as well. It is used to correct crossbites and improve the way the upper and lower teeth and jaws fit together. It also contributes to a broader, more attractive smile. A crossbite is present when the upper teeth are biting inside the lower teeth. Ideally, the lower teeth should fit inside the upper teeth. When patients are still growing, the upper jaw is very responsive to expansion, but if left untreated, a crossbite can lead to permanent changes in bone and facial structure, as well as a poorly functioning bite and excessive wear of the teeth.

The RPE is activated using a small hex wrench, producing outward pressure which will expand the upper jaw to a desirable width. You will be instructed on how often to activate the appliance. When sufficient width is obtained, activation is discontinued and the appliance is usually worn for a period of time to maintain the new arch width.

What to Expect

When your RPE is activated, you may feel pressure in the upper jaw and nose area that will last for several minutes. Your upper teeth may feel tender following an adjustment and the tenderness is most noticeable during the first week of expansion. An over-the-counter pain reliever (eg. lbuprofen or the medication you normally take for a headache) should help to relieve these symptoms. If significant and/or prolonged discomfort persists, please call our office.

You may notice a temporary increase in saliva during the initial period of adaptation, but this will decrease as you become comfortable with the appliance.

Some patients have trouble swallowing and speaking clearly during the first week. Drinking water and reading out loud for the first few days, will help improve the situation.

You may notice a space developing between your upper front teeth. Do not be concerned, as this is a good indication your appliance is working. The space will reduce in size after expansion is discontinued.

Very infrequently, bleeding from the nose may occur following activation of the RPE. This is more common in those who are prone to nosebleeds. If this occurs, tilt your head forward and pinch your nostrils.

Occasionally, slight bruising may occur under the eyes. This should disappear within a few days.

RPE Instructions



Continue to brush and rinse your teeth after each meal or snack. It is very important to keep your expansion appliance clean to prevent food and plaque building up along the edges of the appliance and along the gumline.

If any part of the appliance becomes loose or dislodged, please contact our office immediately so we can schedule an appointment to repair the problem.

Please bring all parts to your appointment!

It is important to keep your scheduled appointments to allow us to monitor the progress of your treatment and to avoid overexpansion. If you need to cancel or postpone an appointment, please ask whether you should continue activating the RPE appliance. Activation may need to be discontinued if an appointment needs to be moved more than 2 days into the future.

To activate the appliance

- Tip the patient's head back and have him/her open mouth as wide as possible
- Place the wrench on the hex portion of the expander (located in middle section), so that the arm of the wrench is positioned as close to the top teeth as possible
- Swing the wrench down from the top teeth to meet the lower teeth.



The expansion appliance should be turned:



] two turns per day (one turn before breakfast and one turn after dinner is preferable)



do not activate at this time

If you encounter difficulty turning the appliance, please contact our office immediately.

If you forget to activate the appliance, do not try to catch up with additional turns. This can result in unnecessary discomfort. Please follow the suggested schedule to ensure the desired results are achieved.