



Rapid Palatal Expander (RPE)

When the upper arch is too narrow to fit properly with the lower arch, expansion of the upper arch is often indicated. In many cases, the most stable way to accomplish the expansion is by applying orthopedic forces to the upper arch to achieve skeletal rather than dental expansion. The upper jawbone in growing patients has growth centers called sutures which are soft cartilage. The mid-palatal suture separates the roof of the mouth into left and right halves. When pressure is applied in a controlled manner, the mid-palatal suture can be significantly widened correcting crossbites and creating more room for the eruption and alignment of teeth.

The appliance most often used to expand the maxilla is called a **Rapid Palatal Expander (RPE)**. This appliance is custom made for each patient. It is activated at home by the parents of younger patients or by older patients themselves. Expansion of the upper arch is accomplished in 2 to 8 weeks. The appliance remains in the mouth for approximately 3 to 4 months to hold the expansion while new bone formation takes place.

WHAT TO EXPECT & CARING FOR YOUR RPE:

- The back teeth may be uncomfortable for 48 to 72 hours after placing the RPE.
- Swallowing may be awkward for several days; because of the room that the appliance occupies in the roof of the mouth. Speech may also be affected for the same reason. Most patients adapt and compensate within a day or two.
- A significant space may develop between the two upper front teeth. This is temporary and will usually begin to close automatically when the RPE is no longer being activated.
- After the initial adjustment period, when the RPE is activated, the patient may feel pressure for a short time but there should be little, if any, discomfort.
- Brush normally. Be sure to keep the entire appliance clean.
- Avoid eating hard or chewy candy, do not chew ice, and do not play with the RPE with your tongue or fingers.

INSTRUCTIONS FOR ACTIVATING AN RPE:

- Place the key in the front hole in the center of the RPE and push from the front toward the back until it stops (you will see the next hole appear). That is one complete turn.
- Withdraw the key towards the back of the throat when it will not go back any further and a new hole has appeared at the front of the RPE. **Be careful not to unwind the appliance.**
- The doctor will advise you how many times per day to activate the appliance.
- Please call the office if you have any problems or concerns.

Questions? Call us at – 971-9601
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