



## **EXPANDER INFORMATION**

A Rapid Palatal Expander (RPE) is an upper appliance that places pressure on the upper jaw by turning a midline screw. The pressure separates the mid palatal suture thus making the upper jaw wider, which can correct cross bites and create space. The expander will NOT hurt. The appliance will rest gently on the roof of the mouth. The patient will have a lot of saliva when the appliance first goes in. This will last for a couple of hours. We will encourage the patient to talk out loud a lot for the first couple of days. This will help the tongue adjust to its new position on the roof of the mouth for certain speech sounds.

During an examination, Dr. Tesseyman evaluates the overlap of the teeth. The upper teeth should overlap the lower teeth by about half the width of the upper tooth. When the upper teeth are on the inside of the lower teeth in the back sections of the mouth, it is called a posterior cross bite. We will make sure you are comfortable turning the appliance before you leave the appointment. We correct posterior cross bites as soon as we see them because we can obtain more room for other un-erupted teeth. Also, a posterior cross bite, if it's only on one side, can cause the lower jaw to grow asymmetrically to that side. Therefore, correction of a posterior cross bite helps prevent asymmetrical growth of the lower jaw.

Since we are separating a mid palatal suture, it is better to do this procedure at a younger age before the palatal suture becomes fused.

### **How do you turn or activate an expander?**

Activation of an RPE is done by a parent, guardian or other person. You can't turn it yourself.

The patient is given a small wire that inserts into a small hole in the screw of the expander. I call this wire a key. Have the patient lay down on the bed or couch where there is good light. Then, the patient tilts their head back so that the RPE can be seen clearly. Hold the key with two fingers. Place the wire (Key) into the front hole of the rapid palatal expander and then rotate it to the back of the mouth until it stops. Pull the key out towards the back of the mouth. You should now be able to see a new hole in the front for your next turn. If you do not turn the screw completely to the back, the new hole in the front may be partially block and the wire won't go into it when needed. If that's the case, you have to find the hole in the back of the mouth and complete the turn. We consider that one turn, from front to back. Each turn of the appliance represents a little less than 1/4 mm of expansion (it is extremely gentle). Usually a patient will turn the expander once or twice a day for a prescribed number of days (generally between 10-12 days). Then, you stop turning the expander and have Dr. Tesseyman evaluate the width to see if more turns are needed.



### **How long is a rapid palatal expander used?**

After your orthodontist tells you that you have turned the expander enough, and the cross bite is eliminated, they will leave the RPE in place for about five months. This is so that the palatal suture can be closed with new bone formation and become stable. If an RPE is removed early, some of the width gained could be lost.

During the expansion, a space may develop between the front teeth. This is very normal. This space will close as the permanent teeth erupt or will be closed with additional orthodontic appliances depending on the age of the patient.

