The TAD-Supported Rapid Palatal Expander (RPE)

The temporary anchorage device (TAD)-supported RPE is critical to achieving harmony between the width of the upper and lower jaws in older adolescents. Unless instructed otherwise, the key is to be turned 1x per day for the first week, then 2x per day – once in the morning and once at night. The key is placed in the center hole of the expansion screw and turned towards the back of the mouth (in the direction of the arrow). It is important to always make a full turn so you can easily find the next hole. Also, it is important to support the expander with your other hand as you turn.

What to expect?

1. You should not anticipate much discomfort from the appliance other than pressure that lasts for 10-20 seconds following every turn. If you do not feel pressure, the key was not inserted correctly or the RPE was not turned properly.
2. Towards the end of the first week, you may have discomfort that is more intense or lasts for a little longer following the turn. This is to be expected, and you may want to take whatever medicine you would take for a headache ~30 minutes prior to turning. By the beginning of the second week and onward, you should only feel brief pressure again.
3. As the key is turned, a very large space will open between the front two teeth. Braces will be placed on the upper teeth over the next few months to and these will help to close the space.
4. You may have a lot of saliva (spit) in your mouth for the first night. This is normal and is your body’s natural reaction to the new appliance. Keep swallowing, and this and/or a gagging sensation will pass quickly.
5. You may lisp for a few days until your tongue gets used to the appliance being there. Practice reading aloud for 5-10 minutes a night to help train your tongue and improve speech.

Care/cleaning

1. Do not eat anything hard – this can cause the RPE to loosen
2. Do not eat anything sticky or gooey – this can clog the screw and make it hard to find or turn
3. **DO NOT EAT POPCORN, NUTS, OR CHIPS.** The hard fragments or shells can get stuck under the RPE and cause a very painful sore.
4. Food will get trapped under the expander. Vigorously rinsing with water for 30 seconds after eating will help flush out any particles.

Emergencies

1. If the expander should loosen and you are able, take it out. Please call or email the office and we will schedule you for an appointment to have it replaced or reinserted.
2. If you have discomfort that lasts longer than 15-30 minutes after turning, please call the office.
3. If you experience any swelling or soreness around the pins or edges of the expander, stop turning and call the office for an evaluation.
4. If you can’t find the hole for the key, please call the office.