

Miniscrew Assisted Rapid Palatal Expander (MARPE)

MARPE is an appliance that increases the width of the upper jaw. MARPE causes the upper jaw to widen by applying the force directly to the bone using four miniscrews rather than applying the force to teeth. This helps to open space in the nose more effectively than expanders that push only on the teeth.



How To Prepare:

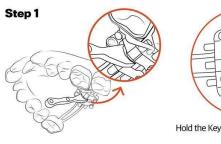
When you come in for the procedure, we will utilize local anesthesia to place the four miniscrews.

- Before you come in, have a good meal and take 800 mg of Ibuprofen for adults or 400-600 mg for teens.
- It is normal to feel a little tenderness around the mid palatal suture for a few days after placement.
- After the procedure, you can continue to take Ibuprofen for 1-3 days until the discomfort subsides.
- We recommend a warm saltwater rinse 2-3 times a day.

Activate your expander ____times a day, for a total of ____ days. Then turn __ for __ days. Send us photos of the expansion and we will instruct next steps.

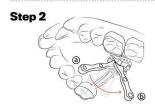
Send photos on Day 7. Thank you!

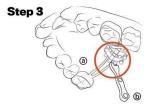
How to turn MARPE key





Hold the Key and engage it to part "3".

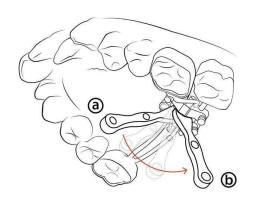




With them engaged, slide key slowly from ⓐ to ⓑ in the direction of the arrow.

Separate the key from the "" point.

Precaution for MARPE activation



After on turning don't separate from the "③" point when removing the key.

* If it is separated from the "③" point, it does not expand

Food List for MARPE

The first week

Avoid: Peanut butter or Nutella textured foods, breads, meats and cheeses in addition to



After the first week

Avoid: Ice, peanut brittle, hard crust pizza, corn on the cob, ribs, dried meats, chips, hard tacos, popcorn, pretzels, hard rolls and bagels, whole raw or hard fruits and vegetables

Foods to eat:

- Soups: tomato, chicken broth, lentil, pea, butternut squash, miso
- Yogurt and pudding
- Smoothies
- Jell-O
- Applesauce and foods with similar consistency
- Over cooked noodles and pasta
- Scrambled eggs
- Mashed Potatoes/cauliflower
- Oatmeal
- Tofu
- Ice cream
- Guacamole
- Hummus

Foods to eat:

Dairy: soft spreadable cheeses, cottage cheese **Breads and Grains**: corn bread, soft thin sliced bread, muffins, cooked beans, oatmeal, cream of wheat, soggy cereal

Proteins:

- Soft boiled eggs
- Cooked soft chicken, chicken nuggets
- Thin slices of lunch meat
- Meatballs, meatloaf, corned beef
- Stewed meats, pot roast
- Tamales
- Salmon, tuna, fish sticks, fish salad, fish filets, crab cakes

Fruits/Vegetables: steamed/cooked/cut up fruit and vegetables, corn cut off the cob, avocado, salsa

What To Expect After

- Tightness: As we expand, you may experience discomfort or tingling sensation under the
 palate or under your nose. Occasionally, you may also experience headache on the side of
 your forehead and transient changes in the nose area.
- **Spaces**: During expansion, you will develop a space between the front teeth and back (posterior) teeth may not fit comfortably.
- **Eating**: Chewing forcefully with posterior teeth is not recommended because it reduces the stability of the miniscrews and the MARPE device. Therefore, we recommend a softer diet and it is best to avoid hard, sticky, and crunchy foods. Please refer to our food list for MARPE.
- Talking: At first, you may have trouble speaking but placing your tongue on the appliance and practicing reading out loud will help your speech to adjust.
- **Brushing**: Proper oral hygiene and home is required to minimize possible infections or loosening of the appliance. Continue to brush your teeth 3-4 times a day. When brushing your teeth, make sure that you brush the appliance as well, utilizing the interproximal brushes in your brushing kit to clean around the wires and remove any food that may be trapped in the appliance. Expansion may fail if the sutures are too rigid or if inflammation occurs around the miniscrews. In this case, we may have to replace the miniscrews or stop the procedure.
- Retention: When the expansion is completed, a minimum of 3-6 months and a maximum of 12-18 months of retention period are required to minimize relapse as the bone matures. After completing the orthodontic treatment, retainer wear is required to minimize relapse. This is particularly necessary when the upper jaw is widened with MARPE. This will improve the long-term stability of the treatment.