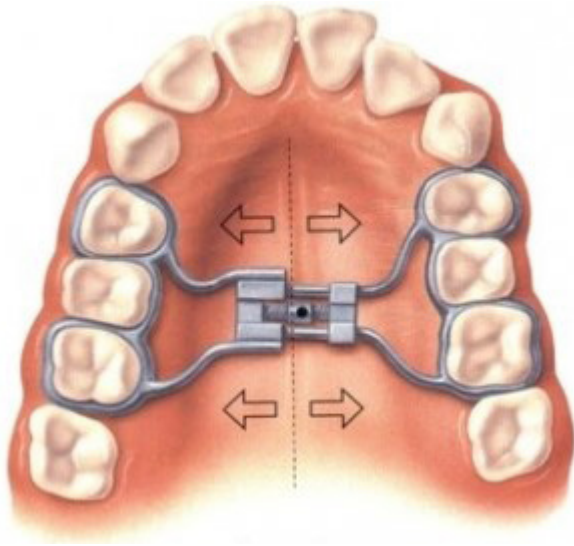


## SARPE (Surgically Assisted Rapid Palatal Expansion)

People who may benefit from palatal expansion include those with a narrow upper jaw that is leading to a crossbite and, often, dental crowding. The SARPE surgery is done in coordination with your orthodontist. It is often done before you start braces, but sometimes a short course of braces is done to prepare you for the SARPE. The surgery involves making bony cuts that will allow expansion of your upper jaw with the use of a palatal expander device.



Here is a common example of a palatal expander; this type of expander is placed on your teeth by your orthodontist before the surgery. There are other expanders that are secured to your bone.

Below is an example case showing before and after palatal expansion.



## **Surgery**

The surgery is done in the operating room with the patient asleep under general anesthesia. The surgery lasts, on average, about 2 hours. Patients are typically discharged home the same day. The incisions for this surgery are made entirely on the inside of the mouth.

## **Diet**

You will be on a liquid diet for the first 2 weeks. A 5 to 10 pound weight loss is common during these first 2 weeks. It is important to maintain your hydration and nutrition as much as is possible. You will remain on a modified, no chew diet for several weeks.

## **Swelling and Bruising**

Swelling (and often bruising) following corrective jaw surgery is expected and typically peaks around 3 to 5 days post-op. It will take several months to fully resolve, although the majority of swelling will subside by 1 month post-op. Applying ice regularly in the first week following surgery is helpful in reducing swelling as is keeping your head elevated. You can sleep with at least two pillows or in a recliner chair to keep your head elevated. You will be provided with ice packs.

## **Numbness**

Most patients experience numbness in the respective jaw (including gums, teeth, overlying skin, and lip) following surgery. This numbness can take a long time (more than 1 year) to resolve and may result in permanent changes to feeling, although permanent numbness is uncommon following this surgery.

## **Damage to Teeth**

There is a risk of damage to your teeth with this surgery. If such damage occurs, you may need a root canal and/or extraction of the affected tooth/teeth. Damage to teeth can result from direct trauma from being cut during surgery or indirectly from diminished blood supply to the tooth/teeth related to nearby bony cuts/incisions.

## **Possible Need for Revision**

Although not common, you may require revision surgery. This could involve further mobilization of the bony segments.

## **Physical Activity**

It is encouraged that you get up and walk around often during your recovery. Please avoid activities that bring your head below your waist level for the first several weeks. Please limit your physical activity level to no more than walking and light hiking for the first 6 weeks. Physical activities requiring heavy lifting (anything that is strenuous enough to cause you to clench your teeth) or activities where the jaws would have a tendency to be hit or jarred, such as contact sports, should be avoided for 3 months. Examples of exercises that are non-jarring/non-contact are stationary bike, elliptical, stair climber. You can resume ALL physical activity including contact sports after 3 months.

## Coverage

Corrective jaw surgery is an approved surgery under your health plan. For specifics regarding your copay, please contact Member Services (number is on your Kaiser Permanente ID card) and they will tell you what your copay for outpatient surgery is. Orthodontic treatment is a dental benefit and is not included in the health plan. You will also need pre and post-op imaging (cone beam CT); you can inquire about your radiology copay with Member Services as well.

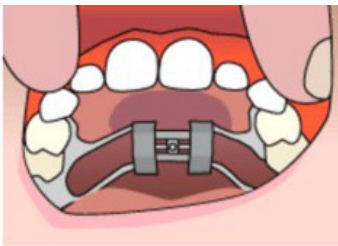
## Time Off Work/School

Following surgery it is important to allow your body time to rest and heal. It is recommended that you plan about 2 weeks off. You will not be able to perform any strenuous physical activities for 3 months following surgery; if your job/school class requires strenuous physical activity please let us know so that we can generate a work/school note for you that lists modified duty requirements. Many patients file for disability during this time; if you need any forms for disability/FMLA/work filled out, please contact the Medical Secretaries Department at:

Oakland Medical Secretaries Department  
3701 Broadway, 5th Floor  
510-752-6026

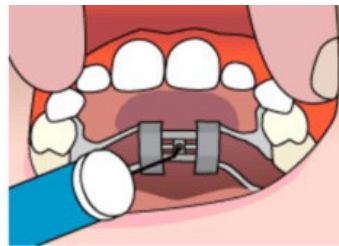
## Activation of the Device

You will be scheduled a post-op appointment about 1 week after your surgery. It is at this appointment that you will be shown how to activate the device and begin expansion (a commonly used activation protocol is demonstrated in images below). Expansion typically proceeds with turning the appliance twice per day, once in the morning and once in the evening, however, you will be given instructions specific to you at your follow-up appointment.



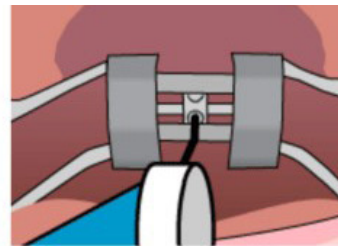
**Step 1**

In a well-lit area, tip the patient's head back.



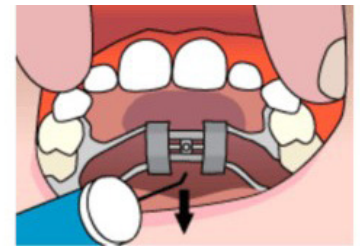
**Step 2**

Place the key in the hole until it is firmly in place.



**Step 3**

Push the key toward the back of the mouth. You will notice the fender will rotate and the new hole will appear. The rotation stops when the key meets the back of the expander.



**Step 4**

Press back and down toward the tongue to remove the key. The next hole for insertion of the key should now be visible.

## Possible Complications

Stop turning the device if you notice any of the following:

- discolored or darkened teeth at the surgery site
- front tooth or teeth pulling away from the gum
- bone exposed at the gum line
- if you feel an opening in your gum on the roof of your mouth