

TAD or Implant-Supported Expander

Supplemental Informed Consent

Mid-facial expansion without surgery or a minor surgical intervention has been recommended as a portion of your orthodontic treatment. The potential benefits of this treatment include a widening of the nasal floor, an opening of the internal nasal valve, a widening of the palate, improved tongue space, and increased room for the teeth. This treatment may experience fewer dental side effects and greater bone changes than more traditional tooth-borne expansion treatment plans. A TAD expander is designed for direct anchorage in the hard palate. For stability, the TADs (anchorage devices) would be inserted through the entire depth of the bone and slightly into the nasal cavity.

Treatment risks:

In addition to the information provided in the AAO Informed Consent on “Risk, Benefits, and Limitations of TADs”, possible risks of TAD expansion include the following:

- As with any medical device, the success rate of this treatment is high, although not guaranteed. In the event of an unsuccessful attempt, your doctor will review the possible reasons surrounding your lack of response. If you choose to try a second round of expansion, you may be responsible for fees incurred for a second expansion appliance. Our office is also not responsible for any incurred fees from the oral surgeon’s office. Examples of unsuccessful attempts can include but are not limited to: No visible split or minimal split noted, the tad expander becoming loose, too much tipping of the TADs or teeth with no boney change, infection of the TADs, the arms of the expander getting embedded in the tissue, expander shifting to one side, and one side of the jaw moving without the other moving (unilateral split).
- Infection - Infections in conjunction with TAD expanders are possible but rare. Oral hygiene plays a significant role in this, so please keep all appliances as clean as possible. Please consult with your doctor if you experience a fever, swelling, or other signs of an infection.
- Inflammation - Inflammation can be caused by bacteria and food getting caught in the appliance. Maintaining great oral hygiene and cleaning the tads and the appliance daily with a Waterpik is advised. The arms of the expander can also encroach on the palatal tissue. If this occurs, please notify your doctor, and the arms can often be cut away.
- Bleeding - Nasal irritation is expected, and even some minor nasal and palatal bleeding after insertion of the TADs. If this persists or if bleeding is noticed at any point in time more than 48 hours after insertion, please notify your treating doctor.
- Soreness & sensitivity - The upper permanent teeth that are attached to the TAD expander may become sore and sensitive to the touch. Generally, this is normal with treatment, but please notify your doctor if it is severe. The front two teeth may also become sore or tender as the maxillary suture opens. The anchoring teeth may tip as a result of expansion, causing changes in the bite, sensitivity, or pain. Please inform your doctor if you experience any of these symptoms. Communication between the oral cavity and nose - You may experience a small seepage of fluids/ foods between the mouth and nose in the area of the implant insertion, also affecting your

- speech. Should this be the case, please inform your doctor immediately and don't turn expander until this problem is resolved.
- TAD fracture - This complication may occur during the insertion of the implants or during the turning of the device. This is more likely to happen in situations of very dense bone, for example, palatal tori (a larger bony lump). Your doctor will determine if it is necessary to remove the fractured piece of the implant or if it is acceptable to maintain its position.
- Facial/smile asymmetry - This outcome may result when pre-existing facial asymmetries exist or as a result of uneven response of the mid-facial sutures.
- Numbness - Should you experience numbness in your face, upper jaw, or teeth after the local anesthetic wears off, please stop turning the expander and inform your doctor immediately.
- Nasal congestion - Nasal congestion is expected for several days after delivery of the expander. Inform your doctor if nasal congestion worsens or you develop an earache and/or hearing loss.
- Headache - A minor headache and tenderness in the temporal areas can be expected during activation of the expander.
- "Jaw cracking/fracturing/popping sound" - You may experience this noise when your jaw sutures will be opening. Please stop activating the device should you hear these sounds/experience such sensations and contact your doctor for further instruction.

To ensure successful and safe expansion of your palate, a CBCT 3D imaging may be recommended prior to, during, and after completion of the expansion. Successful and safe orthodontic treatment requires cooperation, compliance, and close communication between the patient and the treating doctor. Please be in touch with our office weekly while turning so we can monitor progress carefully.

TAD expansion may not always be successful due to variations in age, gender, anatomy, and physiology. Please be sure to tell your doctor if you have or have had any of the following conditions: Bisphosphonate use, recent steroid use, diabetes, bleeding disorder or anti-clotting treatment, hypermobility disorders or Ehlers-Danlos, and any other condition that could affect bone healing. Please also notify your doctor if you have had any other facial surgeries in the past, including plastic surgery, nasal surgery, or rhinoplasty. Please also notify your doctor if you have had any recent or past facial injuries, including falls or trauma to the bones of the head and/or face.

I have read this consent and understand the background, risks, benefits, and management of using a TAD-supported expander. I have had an opportunity to ask questions about this treatment, to consult an oral surgeon, and I understand that an alternative to such treatment is no treatment.

Patient name

Date

Patient or parent signature

Orthodontist signature