Why is this surgery used?

The tongue is made primarily of muscle. For people with obstructive sleep apnea (OSA), the tongue may relax during sleep and collapse, blocking the upper airway. Genioglossus advancement creates more room for the tongue during sleep, so airway collapse does not happen.

The genioglossus is the muscle located under the tongue that helps you stick out your tongue. It is attached to a small bone on the inside of the lower jaw. A genioglossus advancement is a surgical procedure where the tongue muscle that is attached to the lower jaw is pulled forward (advanced), pulling the tongue more forward and less collapsible during sleep. This surgery will allow the airway to widen during sleep. This surgery is done for patients that have collapsing of their airway at the level of the tongue, and cannot tolerate CPAP therapy.

- See the video here to watch a description of the procedure:

What will happen during the procedure?

This procedure is done in the operating room with general anesthesia. General anesthesia means that you receive drugs that make you unconscious and have no awareness during your surgery.

1. A small incision is made in the front of your lower mouth. The incisions all take place within the mouth, so you will not have any scarring.
2. A hole is made in the lower jaw bone. This piece of bone along with the attachment for the tongue is pulled forward and fixed by a small screw or a
plate in the external bone surface. This procedure is frequently done with other surgeries to improve obstructive sleep apnea.

**Will I have any scarring from this procedure?**
This surgery is carried out inside your mouth, which means you will not have scars on the outside of your face.

**What side effects can I expect after surgery?**
After genioglossus advancement you can expect to have:
- Numbness to the lower face
- Sore throat
- Drooling
- An incision with dissolving stitches to the inside of your lower lip
- Difficulty with swallowing
- Swelling

**You may also have:**
- Nausea and vomiting
- Difficulty tolerating food or medications
- Constipation
- Diarrhea

These symptoms are usually temporary, and we will be available to help you manage them.

**When can I return to work or school?**
We advise taking 1-2 weeks off after your surgery. This period may be shorter or longer based on your surgical procedure. It takes at least 6 weeks for your jaw to heal.
How do I manage my pain after surgery?
Your doctor may prescribe acetaminophen, ibuprofen, gabapentin (Neurontin), or opioid pain medications to help treat pain or discomfort following surgery. You must not drive or drink alcohol while taking opioid pain medications.

How do I care for the incision?
The stitches inside your mouth will keep your incision closed as you heal. They will dissolve between 2-3 weeks from your surgery date. You will receive chlorhexidine (Peridex) or be asked to use warm salt water rinses to prevent infection.

What will my diet be like after surgery?
The swelling and the numbness will make eating and drinking difficult. You will be on a liquid diet for the first 7 days after surgery, followed by another 7 days of soft foods. You should be able to tolerate a normal diet on day 14 following surgery.

What will my activity be like after surgery?
- Avoid strenuous activity for 6 weeks
- Avoid lifting greater than 15 pounds for 6 weeks

When should I call my doctor?
Call your doctor as soon as possible if you notice any of the following:
- Severe or increased pain not relieved by medications
- Temperature over 100.8 degrees Fahrenheit
- Foul smelling drainage coming from the mouth
- Your child is not taking enough oral fluids
What follow-up care will I receive?

- Your child will have a post-operative checkup at 2 and 6 weeks after surgery.
  - Bring any questions you have to your 2-week appointment.
- If you are unable to keep an appointment, please be sure to call and reschedule.
- Plan for a repeat sleep study about 3 months after surgery to check on your child’s progress and to look at the airway functioning

What is the contact information for the clinic?

- Monday-Friday 8:00am-5:00pm:
  - Call Pediatric Oral and Maxillofacial clinic at (734) 232-6975
- After 5:00pm, or on weekends if you have urgent issues:
  - Call the hospital at (734) 936-4000 and ask the operator to page the “On call pediatric oral surgeon.”

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

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