



Help your patients sleep easier. Consider upper airway stimulation therapy.

The Ohio State University Wexner Medical Center is proud to be one of the few facilities in Ohio to offer upper airway stimulation therapy – an innovative surgical treatment option for patients with obstructive sleep apnea who can't tolerate other treatments, such as CPAP.

How does upper airway stimulation work?

With obstructive sleep apnea, the tongue or other soft tissue may block the airway, creating dangerous breathing problems during sleep. Upper airway stimulation uses an FDA-approved implantable device (similar to a pacemaker) to monitor a patient's distinct breathing patterns and provide the exact stimulation needed to contract the throat muscles and keep the airway open.

What's the treatment process for upper airway stimulation?

- The upper airway device is implanted during an outpatient surgical procedure that typically lasts 60 to 90 minutes.
- Two small incisions are made:
 - » one under the chin to connect a wire (called a lead) to the nerve that controls the tongue
 - » one below the collarbone to place the battery and the respiratory sensor

How does a patient use the implant?

- The device isn't activated until a month after surgery to allow for full recovery. Patients may experience mild discomfort the first few days and some scarring, but most report minimal pain.
- After one month, the patient returns to their sleep medicine physician at Ohio State to have the device activated and to set initial stimulation parameters.
- The patient is then able to turn the device on and off using a handheld remote. The device can be set to start at an interval after the patient goes to bed (typically 30 minutes), allowing adequate time for the patient to fall asleep naturally.
- Throughout the night, the device continually monitors the patient's unique breathing patterns, sending stimulation to the muscles of the tongue only when the patient inhales, reducing obstructive events.
- Upon awakening, the patient simply turns off the device using the remote.

Is upper airway stimulation successful?

Long-term studies show patients with upper airway stimulation experienced:

- A 78% reduction in sleep apnea events
- Reduced snoring, with 85% of bed partners reporting no or only soft snoring
- Improved quality of life and daytime functioning

Are there side effects to upper airway stimulation?

Some patients report mild twitching of the tongue during use, but this can be minimized by adjusting the stimulation settings.

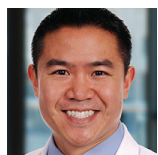
Is the treatment a long-term solution?

A follow-up sleep study helps each patient maximize the device's effectiveness and appropriate stimulation levels. The device battery lasts about 10 to 12 years and can be replaced when necessary.

Who's a good candidate for this surgery?

- Patients must be over age 18 with a confirmed diagnosis of moderate to severe obstructive sleep apnea.
 - » If your patient doesn't have a confirmed sleep apnea diagnosis, we can help them schedule the required sleep studies prior to their surgical consultation.
- The upper airway stimulation device might also be appropriate for those who have both obstructive and central sleep apnea, as long as the central sleep apnea episodes account for less than 25% of all disrupted breathing episodes.
- Candidates should have a BMI of 32 or less, although we'll work with patients on an individual basis.

Why should I refer my patient to the Ohio State Wexner Medical Center?



- We're currently the No. 1 implant center in the nation, completing more than 400 implants since 2015.
- Eugene Chio, MD, otolaryngologist at the Ohio State Wexner Medical Center, pioneered the two-incision approach for this therapy, resulting in a faster surgery and quicker recovery.
- We've been designated an Inspire Center of Excellence for building and maintaining a program that delivers positive, predictable and enduring outcomes in patients indicated for Inspire Upper Airway Stimulation therapy.

How do I refer my patient?

We're currently accepting patients at our clinic locations in Columbus and Dublin. To discuss a patient for potential referral, please call **614-366-3934** or fax **614-293-9698**.

