PROCEDURE

Uvulopalatopharyngoplasty

Uvulopalatopharyngoplasty is surgery that reshapes throat tissue to improve airflow during sleep.

PURPOSE
Widen the throat to reduce obstructive sleep apnoea

PROCEDURE TYPE
Therapeutic surgery through the mouth

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General anaesthesia

HOW LONG IT TAKES
About 60 to 120 minutes

PREPARATION
Fasting, medication review, and transport home

RECOVERY
Often overnight; no driving after anaesthesia or sedating pain medicine

MAIN RISKS
Bleeding, infection, swallowing changes, persistent sleep apnoea

RESULTS
After healing and a follow-up sleep study

Overview

Uvulopalatopharyngoplasty, usually shortened to UPPP, is an operation that creates more space at the back of your throat. It is mainly used to treat obstructive sleep apnoea, also called OSA.

OSA happens when the upper airway repeatedly narrows or closes during sleep. This can interrupt breathing and lower oxygen levels.

During UPPP, the surgeon removes, reshapes, or repositions tissue from the soft palate and side walls of the throat. The soft palate is the flexible tissue at the back of the roof of your mouth. Part or all of the uvula-the small piece of tissue hanging in the centre-may be removed. If you still have your tonsils, tonsil removal may be included.

UPPP is performed through the mouth, so it does not usually leave an external scar. The exact operation is tailored to your anatomy. Some modern techniques reposition tissue rather than removing a large amount.

Why the procedure is performed

UPPP may be offered when tissue around the soft palate contributes to airway blockage during sleep. Your assessment may include a sleep study, an examination of your mouth and throat, and sometimes a small flexible camera passed through the nose.

The main aims are to:

UPPP does not reliably cure OSA. Some people improve but still need positive airway pressure, often called CPAP, or another treatment afterward.

The operation may occasionally be considered for severe snoring without OSA. Because it is irreversible and has meaningful risks, less invasive options are usually considered first.

- Make the upper airway less likely to collapse during sleep
- Reduce the number or severity of breathing interruptions
- Improve symptoms such as disruptive snoring or daytime sleepiness
- Reduce reliance on other treatment in selected people

Who should and should not have it

UPPP may be suitable if you have confirmed OSA and the main area of narrowing is around the soft palate or tonsils. It is often considered when CPAP has not worked for you despite efforts to improve comfort, or when you cannot use it consistently.

The likely benefit depends on where your airway collapses. Surgery aimed at the palate is less likely to help if most of the blockage is behind the tongue, within the nose, or caused by several levels of the airway.

UPPP may be avoided or delayed if you have:

Smoking can slow healing and increase breathing and wound problems. Your team may ask you to stop before surgery. Pregnancy, recent illness, or poorly controlled long-term conditions may also mean postponing the operation.

Your surgeon should explain what tissue they plan to change, the chance of meaningful improvement in your case, and whether you may still need CPAP.

- An active throat or chest infection
- A bleeding disorder that has not been controlled
- A medical condition making general anaesthesia unacceptably risky
- Central sleep apnoea rather than obstruction of the throat
- No clear evidence that the palate contributes to the blockage
- No safe plan for recovery, monitoring, or help at home

How to prepare

Your treating facility's own instructions take priority over general information in this article.

You will be told when to stop eating and drinking before the anaesthetic. Following these fasting instructions lowers the risk of stomach contents entering your lungs.

Give the surgical team a complete list of your medicines, supplements, allergies, and previous reactions to anaesthesia. Ask specifically about blood thinners like warfarin or apixaban , aspirin, anti-inflammatory pain medicines, and medicines for diabetes or weight management. Do not stop a prescribed medicine unless the treating team tells you to.

Arrange for someone to take you home. Depending on your health, OSA severity, and the extent of surgery, you may stay overnight for observation.

Prepare soft foods and suitable drinks for your return home. If you use CPAP, bring the equipment if requested. Your team will decide whether and how it should be used immediately after throat surgery.

What happens during the procedure

You will have general anaesthesia, meaning you are unconscious and do not feel the operation. A breathing tube supports your breathing while the surgeon works through your mouth.

The surgeon examines the palate, uvula, tonsils, and side walls of the throat. Depending on the planned technique, they may remove the tonsils, shorten or reshape the uvula, trim excess soft-palate tissue, or place stitches that pull throat tissue forward and sideways.

The treated areas may be closed with dissolvable stitches. There are usually no cuts on the skin.

Afterward, you are taken to a recovery area. Staff monitor your breathing, oxygen level, bleeding, pain, and ability to swallow. People with more severe OSA or other health concerns

may need closer or longer monitoring.

Recovery and what to expect afterward

Pain: Throat pain can be substantial and may also be felt in the ears because the throat and ears share nerve pathways. It often lasts more than a week. Take pain medicine exactly as directed. A white or yellow coating over the healing area is usually part of normal healing, not pus.

Eating and drinking: Swallowing may be uncomfortable. Start with frequent sips and the foods recommended by your team. Soft, cool foods are often easier. Avoid foods that are sharp, very hot, or likely to irritate the wound until you are told they are safe. Drinking enough is important even when swallowing hurts.

Activity: Rest at first and increase activity gradually. Avoid strenuous exercise, heavy lifting, and activities that could increase bleeding until your surgeon clears you. Snoring and breathing may temporarily sound worse because of swelling.

Driving: Do not drive home. Avoid driving while affected by the anaesthetic, strong pain medicine, poor sleep, or limited neck movement. Follow the specific restriction given by your facility.

Work: Many people need about one to two weeks away from work, and sometimes longer for physical jobs or a more extensive operation. Pain, sleep disruption, and reduced food intake can affect your energy.

Temporary bad breath, throat tightness, a feeling of something being stuck, or mild changes in voice are possible during healing.

Risks and possible complications

Bleeding is an important risk, including bleeding several days after surgery as healing tissue separates. Infection and reactions to anaesthesia are also possible.

Swelling, blood, or mucus can interfere with breathing, particularly soon after surgery. This is one reason postoperative monitoring may be recommended.

Other possible complications include difficulty swallowing, liquids coming through the nose, changes in speech or voice resonance, taste changes, throat dryness, and a lasting sensation of something in the throat. Swallowing and speech changes are often temporary, but they can occasionally persist.

Scar tissue may narrow the throat or the connection between the nose and throat. Teeth, lips, or tongue can also be injured by surgical instruments.

OSA may improve only partly, return over time, or remain unchanged. Continuing OSA without recognising it can leave you undertreated, so symptom improvement alone should not be treated as proof that it has resolved.

Results and follow up

Your surgeon will check healing and discuss any problems with pain, eating, speech, or nasal leakage. Keep routine appointments even if you feel better.

Snoring may change soon after swelling settles, but the effect on OSA cannot be judged reliably by sound or daytime symptoms alone. A follow-up sleep study may be arranged after the throat has healed. The timing is based on the operation, your recovery, and local practice.

The sleep study shows whether breathing interruptions and oxygen levels have improved. It also helps your team decide whether you still need CPAP, an oral appliance, or another treatment.

Long-term results can change with ageing, weight change, and changes elsewhere in the airway.

Alternatives

CPAP keeps the airway open with pressurised air through a mask. It is non-surgical and often controls OSA well, but it must be used during sleep and some people struggle with comfort or fit. Adjusting the mask, pressure, humidity, or support can make it easier to use.

A custom oral appliance moves the lower jaw forward. It is smaller and quieter than CPAP, but it may not control more severe OSA as well and can cause jaw discomfort or changes in the bite.

Weight management can reduce airway narrowing for some people. It takes time, does not guarantee that OSA will resolve, and should not replace effective treatment while significant OSA continues.

Positional therapy helps you avoid sleeping on your back. It is useful mainly when breathing problems occur mostly in that position.

Other operations target different blockage sites. Options can include tonsil surgery, nasal surgery, tongue-base procedures, jaw advancement, or an implanted hypoglossal nerve

stimulator. Each has different eligibility requirements, recovery, risks, and chances of success.

Choosing no active treatment avoids treatment burdens but leaves OSA and its effects unmanaged. Ask what that would mean for your sleep-study findings and overall health.

When to call your healthcare team

Seek emergency help for difficulty breathing, heavy or continuing bleeding from the mouth or throat, vomiting a significant amount of blood, fainting, or severe difficulty staying awake.

Contact your surgical team urgently for fresh bleeding that stops but then returns, inability to drink enough, very little or dark urine, worsening swelling, fever, pain that is not controlled as instructed, or repeated vomiting.

Questions about diet, stitches, returning to work, CPAP use, or mild ongoing discomfort can usually wait for routine contact or your scheduled follow-up.

Common questions

Will I be asleep?

Yes. UPPP is normally performed under general anaesthesia, so you are unconscious during the operation.

Can I drive home?

No. Someone else must take you home. You should not drive while anaesthesia, sedating pain medicine, poor sleep, or significant pain could affect you.

How painful is it?

Throat pain can be strong and may last more than a week. Ear pain during swallowing is also common. Your team should give you a specific pain-control plan.

When will I know whether it worked?

Snoring may change as swelling settles, but improvement in OSA is usually assessed after healing with symptoms and a follow-up sleep study.

Will I still need CPAP?

Possibly. UPPP may reduce airway obstruction without removing it completely. Continue CPAP unless your treating team changes the plan.

Will removing my uvula affect my voice?

Temporary voice or resonance changes can occur. Lasting changes are less common but

possible, particularly when a larger amount of palate tissue is altered.

Sources

- American Academy of Sleep Medicine. Referral of adults with obstructive sleep apnea for surgical consultation: an American Academy of Sleep Medicine clinical practice guideline . Journal of Clinical Sleep Medicine. 2021;17(12):2499-2505.
- American Academy of Otolaryngology-Head and Neck Surgery. Position Statement: Uvulopalatopharyngoplasty . Revised 2019.
- American Academy of Otolaryngology-Head and Neck Surgery. Clinical Indicators: Palatopharyngoplasty .
- National Institute for Health and Care Excellence. Obstructive sleep apnoea/hypopnoea syndrome and obesity hypoventilation syndrome in over 16s . NICE guideline NG202. 2021.
- MedlinePlus Medical Encyclopedia. Uvulopalatopharyngoplasty (UPPP) . U.S. National Library of Medicine.