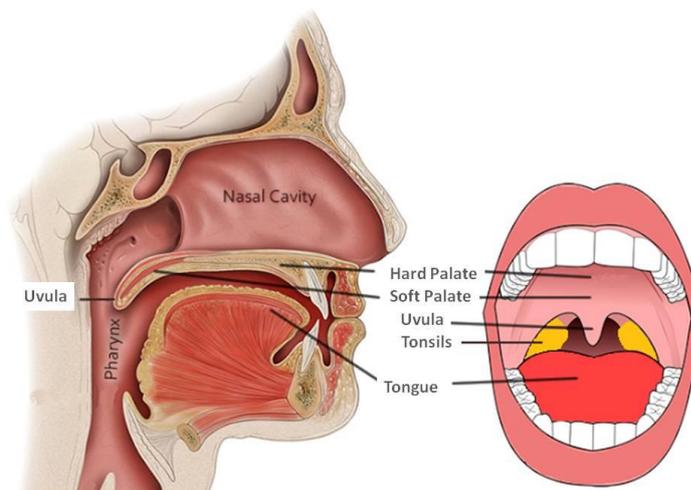


## Snoring & relevant Anatomy

Snoring is the noise produced by excessive vibration and partial obstruction of the upper airway passage during sleep from the mouth and nose to the trachea (windpipe).

There are many causes of snoring, including enlarged tonsils, the uvula, base of tongue and a collapsible soft palate (soft movable back of the roof of the mouth) and/or pharynx (throat wall). Soft palate is responsible for closing off the nasal passages during swallowing so that food and drink do not enter nose. It also closes off the nasal passages during sneezing and singing.

There is no single treatment. There are many surgical and non-surgical treatments, all of which aim to reduce and control snoring rather than to eliminate and cure it.



Snoring is a common sleep related breathing disorder affecting about 25% (quarter) of the adult population regularly. It can be loud enough to disturb those around them and have potentially a devastating effect on relationships. Snoring is part of a disease spectrum. This spectrum ranges from simple snoring with good quality of sleep for the snorer to the rare form, Obstructive sleep apnoea (OSA) when the patient's breathing is interrupted by pauses and gasps several times during sleep. This can lead to a reduction of oxygen levels in the blood leading to symptoms such as excessive daytime sleepiness, irritability, anxiety, depression and morning headaches. It is important to note that these symptoms are not specific and not everyone who has these symptoms will necessarily have sleep apnoea.

Simple



OSA

# Snoring

## Indications for Uvulopalatoplasty

- Snoring
- Obstructive sleep apnea (OSA): Surgery only indicated in selected patients with mild to moderate OSA and needs to be discussed with your doctor. Severe form of OSA is a contraindication for this surgery.

## Investigations

Taking a history and examination may be all that is required. If indicated the following investigations may be requested.

- Nasoendoscopy: A simple examination performed in clinic by passing a flexible scope through the nose to view the airway passage.
- Sleep Nasoendoscopy: Performing Nasoendoscopy in the operating theatre under medication induced sedation to assess snoring.
- Sleep study (Polysomnography): Involves monitoring several parameters of a patient such as oxygen levels and heart rate during sleep. This is requested particularly if there is clinical suspicion of presence of obstructive sleep apnoea.
- Blood tests: Thyroid function and Blood count.

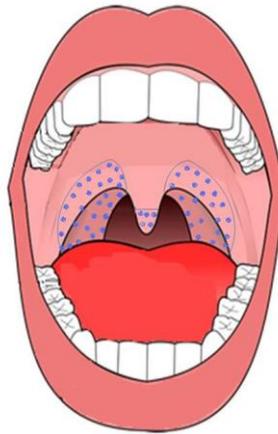
## Uvulopalatoplasty Surgery

Uvulopalatoplasty a surgical procedure performed to reduce or eliminate snoring if other non-surgical measures have failed to do so. Uvulopalatoplasty may also be carried out in combination with other surgical procedure such as tonsillectomy.

Operation is performed under general anaesthesia and will usually take about 30-45 minutes.

The surgery involves making cuts and removing portion of the soft palate and uvula which heals with scarring and results in creating a more patent airway, reduced vibration and hence snoring. These cuts can be made using various instruments such as electrical cautery (diathermy) or Laser.

You should also discuss with your surgeon any possible alternative treatments to surgery.



Surgical removal of part of the soft palate and uvula (dotted)

### **Complications of Uvulopalatoplasty**

- 1) Bleeding - A small amount of “spotting” of blood may be noticed a day or two after surgery. Rarely (1%) patients experience heavy bleeding and need to return to the operating theatre.
- 2) Infection – There is a small risk of developing infection. If this occur, you may require antibiotic treatment.
- 3) Swelling - Commonly patients experience post-operative swelling which naturally improves several weeks.
- 4) Voice change - Rarely do patients complain about a change in their voice. This in particular concerns those in singing profession and should be discussed with the surgeon beforehand.
- 5) Failure to improve all the symptoms or rarely worsening snoring.
- 6) The false sensation of feeling something in the throat may occur in up to 30% of patients which may resolve over several months.

### **After the surgery**

- 1) Your throat will feel very sore and you may also feel sleepy and nauseated as you wake up from sedation.

- 2) It may be painful for you to talk and swallow at first and you will receive pain medication. If you still feel pain, tell the doctor or nurse.
- 3) You may need to stay overnight in the hospital depending on the indication for your surgery and how the operation went. Your breathing will be closely monitored.
- 4) Once you are ready to go home, a family member or friend should be made available to collect you from the hospital.

### **Recovering after the operation**

- 1) Your throat will sore for at least the next 3 weeks and eating and drinking will be uncomfortable for the first week at least.
- 2) Continue to take all of your medications and pain killers.
- 3) Try to eat and drink as you normally would, cold drinks and soft foods in particular will be helpful in the early stages of recovery.
- 4) Do not travel long distances or strain yourself with exercise for at least 2 weeks.

### **Follow Up**

- You should receive a follow up appointment in the post to assess how your recovery has gone and to discuss whether further treatment is needed. This is usually 4 weeks after the operation.

### **Outlook after the surgery**

- Uvulopalatopharyngoplasty is a mainly successful procedure. Patient's will be invited to a follow up appointment around 4-6 weeks after the procedure to discuss how the operation went and whether they or their partner have noticed an improvement in the sound of their breathing as they sleep.
- Despite a successful surgical outcome, it is still important for the patient to make lifestyle changes to avoid snoring issues by stopping smoking, reducing alcohol intake, and increasing exercise. This will lead to the patient noticing the most benefit before and after surgery.

### **Expectations and advice following a Uvulopalatoplasty**

- Avoid all moderate and heavy physical activity, including sport for ten days after the operation. Avoid bending down to pick things up, especially heavy weights. Active

sport should not be commenced for four weeks after the surgery, and even then, slowly at first with gradual build up.

- It is normal to have a sore throat for one to two weeks but it is important to eat and drink as normal to avoid developing an infection which may lead onto bleeding.
- Be careful to avoid drinking and eating hot foods for the first 48 hours as these may lead to bleeding soon after the procedure. Allow them to cool first.
- If you taking blood thinning medications (anticoagulation) such as aspirin, warfarin and clopidogrel, please discuss this with your doctor. You may need to avoid taking your medication for a few days prior and after the operation as they can potentially increase the risk of bleeding.
- Two weeks off work/ school is strongly recommended. A sick note will be provided.
- Do not drive for 48 hours (because of the effect of the general anaesthetic).
- You should not plan to go away on holiday for at least two weeks after your operation.
- Flying should be avoided for the first two weeks after your operation.
- Further surgery may be required depending on what was achieved at the first procedure and the extent of improvement noticed by the patient.

**Please note that the details in this section are for general information only. You should always discuss the risks, limitations and complications of your specific operation with your surgeon.**