

Sleep Surgery Information Sheet

What causes snoring and obstructive sleep apnoea?

Snoring and obstructive sleep apnoea (OSA) involve some degree of narrowing or collapse of the upper airway (nose, mouth and throat) during sleep. There are usually multiple sites of narrowing.

How is it treated?

Most treatments for snoring or OSA aim to keep the airway as open as possible during sleep. Surgery can do this by removing bulky tissues (primarily tonsil-type tissue), changing the shape of the airway or stiffening the airway walls to prevent sleep related collapse. Because multiple sites of narrowing are usual, surgery is usually required at sites in the nose, mouth and throat.

Surgery is usually reserved for patients not able to tolerate other, non surgical treatments or when those treatments have not been successful at improving snoring or OSA. Other treatments may include lifestyle measures (regular sleep times, ensuring enough sleep, reduction of alcohol and caffeine), weight loss, positioning devices (to avoid sleep on your back), dental splints (to pull the lower jaw forward and stiffen the airway) or CPAP (where a mask is worn at night to deliver pressurised air to prevent airway collapse)

Modified uvulopalatopharyngoplasty (UPPP) involves removal of the tonsils and stitching part of the palate (roof of the mouth) forward, to stiffen this part of the throat and open the airway. Part of the uvula (which hangs from the soft palate) may be removed.

Risks

Pain – sore throat for about 2 weeks and is usually severe, multiple painkillers are required to treat this for about 2 weeks.

Bleeding – about 5% of patients have a bleed from the wounds within the first 2 weeks after surgery and require treatment in hospital, with a smaller number needing surgery to stop the bleeding.

Infection – uncommon, but rarely may spread to neck.

Damage to lips, teeth, tongue – very rare, but can include a burn to the lips, mouth or tongue or tooth damage.

Velopharyngeal incompetence – this is when drink, or less commonly food, regurgitates in the nose during swallowing. It occurs for a few weeks in about 10% of patients and is permanent in a small number. It may affect voice quality too.

Globus sensation – feeling of a lump in the throat. Is quite common for a few weeks and is permanent in a small number of patients.

Change in taste sensation – permanent in <1%.

Recovery

Overnight in hospital and two weeks off work and usual activities.

Minimally-invasive tongue channelling using coblation technology, offers low morbidity alternatives to more traditional approaches. Quality of life and severity of OSA have been shown to improve. A needle is placed at different points into the tongue muscle and electricity is passed into the muscle for 15 seconds at each point. This procedure leaves a channel of scar and the tongue muscle can reduce slightly in size over the next 2 months, as healing occurs.

Risks

Change in taste sensation – permanent in <1%.
Damage to nerve to tongue, causing slurred speech and difficulty chewing and swallowing, permanent in <1%.

Recovery

Usually performed with modified UPPP. If performed alone, recovery is usually only a few days.

Lingual tonsillectomy may be needed to reduce bulky tonsil tissue at the back of the tongue. Some people have tonsil tissue at the back of the tongue, which may protrude into the airway. Removal of this can open space at this level.

Risks

Pain, bleeding, infection, damage to lips, teeth, tongue. Change in taste sensation. Damage to nerve to tongue, causing slurred speech and difficulty chewing and swallowing in <1%.

Recovery

Overnight in hospital and two weeks off work and usual activities. May be combined with other procedures of similar recovery.