



ENT CENTRAL

SNORING AND SLEEP APNOEA



DR *Naveed* BASHEETH

EAR, NOSE, THROAT, HEAD & NECK, FACIAL PLASTIC SURGEON

SNORING & SLEEP APNOEA

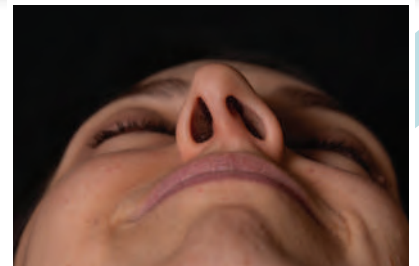
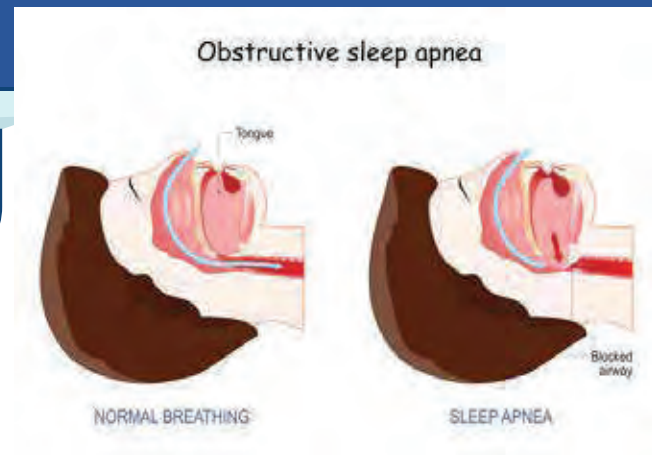
Snoring - defined as noisy breathing - occurs when a turbulent airflow through a narrowed airway causes the tissues in the throat to vibrate, creating an audible noise. Many people who snore also experience periods of slowed or stopped breathing during sleep, known as Sleep Apnoea.

Sleep-Related Breathing Disorders (SRBD) can progress from Snoring to Upper Airway Resistance Syndrome (UARS) to Obstructive Sleep Apnoea (OSA), that can vary in levels from mild to severe.

Obstructive Sleep Apnoea (OSA)

In individuals with OSA, the obstruction of the upper airway is more pronounced and can lead to complete or near-complete blockage periodically during sleep. Airway obstruction can occur in various locations in the nasopharynx, oropharynx or laryngopharynx, with multiple sources of obstruction also being possible.

This disorder is influenced by various factors including nasal obstructions like a deviated nasal septum or enlarged tonsils, a redundant or excessively floppy soft palate, a large tongue base displaced towards the back of the throat, the use of sedative medications, hypotonic or weak throat muscles often exacerbated by alcohol consumption, a bulky neck or throat due to obesity, and weak abdominal muscles.



Dangers of Untreated OSA



Beyond the immediate effects on sleep, OSA can lead to daytime fatigue and is associated with potential health risks such as high blood pressure and cardiovascular complications if untreated. This chronic sleep disruption not only impacts daily performance but also increases the risk of accidents and more severe health issues over time, emphasising the importance of identifying and managing SRBD effectively.

DR NAVEED BASHEETH & OBSTRUCTIVE SLEEP APNOEA

Dr Naveed Basheeth, an accomplished ENT surgeon in New Zealand, possesses high competence in the treatment of snoring and obstructive sleep apnoea. He will conduct a meticulous assessment by taking a detailed medical history, performing a comprehensive examination, and arranging for a sleep study.

This study utilises sensors to monitor sleep patterns, breathing and oxygen levels, which can be conveniently conducted at the patient's home as well. Depending on the diagnosis, along with their age, history and anatomy, Dr Basheeth will instruct the patient on which sleep apnoea treatment or surgery to go for, since each case is exclusive.

Dr Basheeth is an Intuitive Certified Robotic Surgeon for Sleep Apnoea Surgery. He also has done training at the Sleep Institute, St Louis, Missouri, USA, and routinely performs Coblation procedures for sleep apnoea.

Sleep Study Levels

Sleep studies are categorized into levels 1, 2, and 3 based on the complexity and extent of monitoring conducted during the evaluation.

Level 1 sleep studies are comprehensive, typically conducted in a sleep laboratory, and involve monitoring a wide range of physiological parameters including brain and muscle activity, breathing patterns, oxygen levels and sleep quality.

L1

- Are conducted in sleep labs and always observed by an RPSGT in real-time.
- L1 sleep studies offer the same testing as L2, but exclusively in a sleep lab with continuous RPSGT supervision.



L2

- Are conducted at home or in a sleep lab, providing flexibility in test location.
- L2 sleep studies monitor brain and muscle activity, detect PLMD, and offer in-depth analysis of sleep quality and duration.



Level 2 involves the same parameters but with the added advantage of doing the study at home.

Level 3 studies are portable and less comprehensive, primarily monitoring breathing patterns and oxygen levels using simpler devices worn by the patient at home.

L3

- Are conducted in the comfort of your own home instead of a sleep lab or hospital
- During an L3 sleep study, snoring and airflow are assessed to diagnose obstructive sleep apnea.



Level 4 studies are done at home, focus on cornerstone sleep apnoea metrics and efficient for identifying sleep apnoea cases and facilitating timely intervention and treatment.

With study levels 2 and 3, the degree of diagnostic information to assess sleep disorders may not be possible in the absence of a technologist.

NON-SURGICAL TREATMENTS

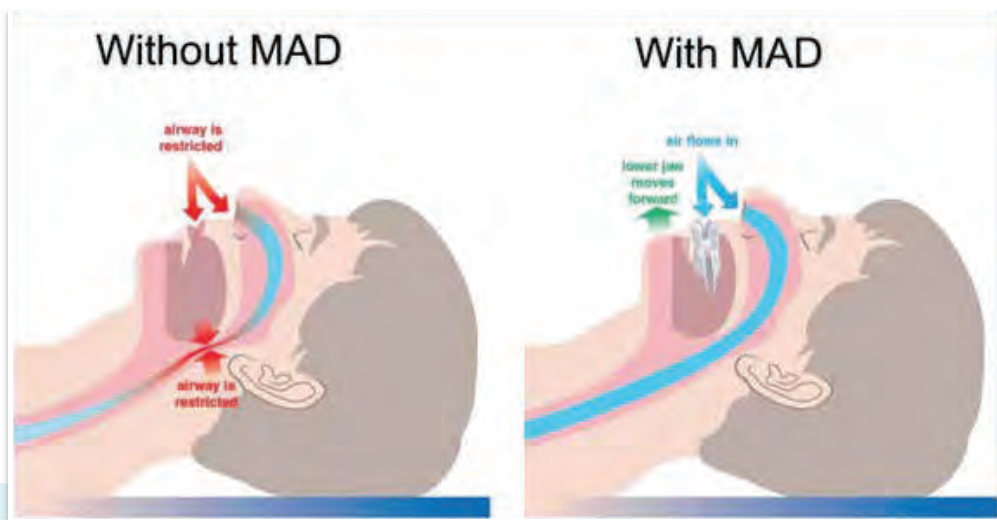
1. Lifestyle Changes

Working out, following a healthy diet, weight loss, bringing down alcohol intake and stopping sleeping tablets, can help. Medications may also be prescribed.



2. Wearing a Device

Mandibular Advancement Splint acts as a healing mouthguard by gently advancing the lower jaw less than a centimetre relative to the upper jaw. This adjustment helps to keep the airway open during sleep.



CPAP (Continuous Positive Airway Pressure) Machine involves wearing a mask connected to a machine that delivers a constant stream of air pressure to keep the breathing passage open throughout the night. CPAP is highly effective in managing OSA by preventing the throat from collapsing during sleep, thus improving breathing and reducing symptoms associated with sleep apnoea.



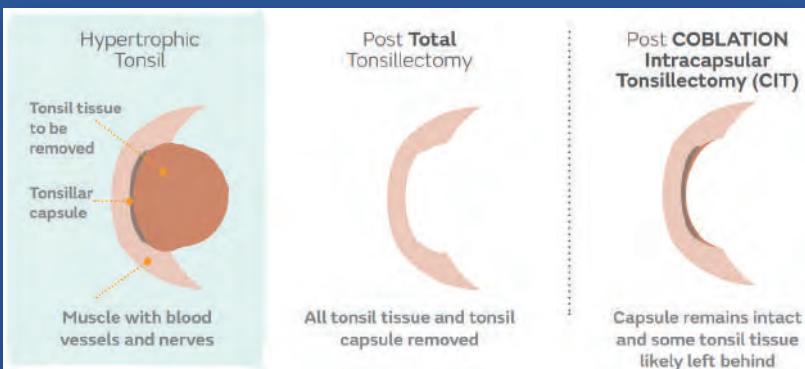
SURGERIES FOR OBSTRUCTIVE SLEEP APNOEA (OSA)

The next consideration for OSA would be surgery. Dr Basheeth performs multiple surgical treatments on a case-by-case basis with options varying from Coblation Uvulopalatoplasty (CAUP), Tongue Base Reduction, Lingual Tonsillectomy, Expansion Pharyngoplasty and Augmentation Rhinoplasty among others. His treatments employ state-of-the-art technologies like COBLATION, Laser, Latera® and Elevoplasty® to provide optimal results for the patients.

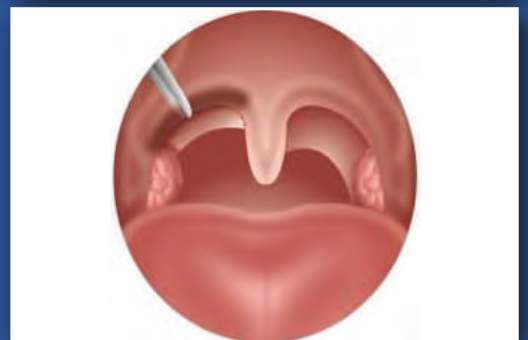
For Paediatric Sleep-Related Breathing Disorder (SRBD)/OSA, Coblation Adenotonsillectomy/ Intracapsular Tonsillectomy-Tonsillotomy/Coblation Turbinate Reduction proves to be an effective surgical strategy to help children.

Dr Basheeth usually considers any referral for paediatric sleep /OSA issues as urgent, since it generally requires early management.

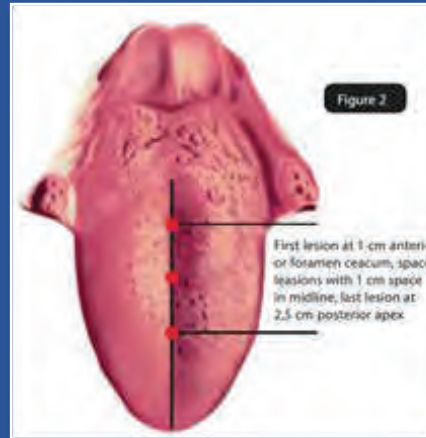
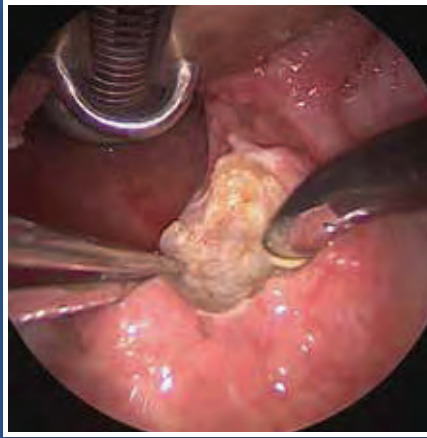
1. **Coblation Tonsillectomy (or Adenotonsillectomy)** allows for the gentle removal of the tonsils (or the adenoids) using radiofrequency energy. **Intracapsular Tonsillectomy** targets and removes only the diseased tissue within the tonsil while leaving the outer shell (capsule) intact. **Intracapsular Tonsillotomy** involves the removal of only the surface of the tonsils leaving the tonsillar capsule intact. This technique aims to reduce the volume of the tonsils while preserving their protective function.



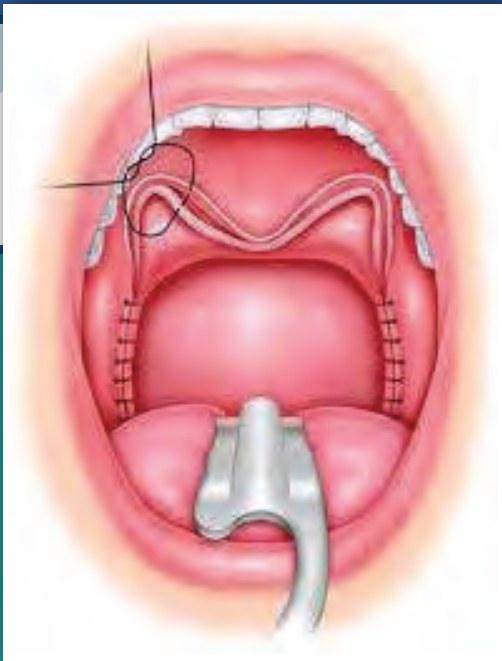
2. **Coblation Assisted Uvulopalatoplasty (CAUP)** treats snoring, and mild to moderate OSA by reducing the size of the uvula and soft palate. This approach is less invasive and allows treatment to be individually tailored based on anatomical/clinical need. Dr Basheeth has been performing CAUP for majority of his OSA patients with a proven record of effectiveness.



3. **Coblation Channelling of the Tongue (CCT)** is a minimally invasive method that can reduce tongue volume with maximum volume reduction typically occurring in around eight weeks post the procedure. It allows for quicker recovery and reduced discomfort compared to traditional surgical methods.

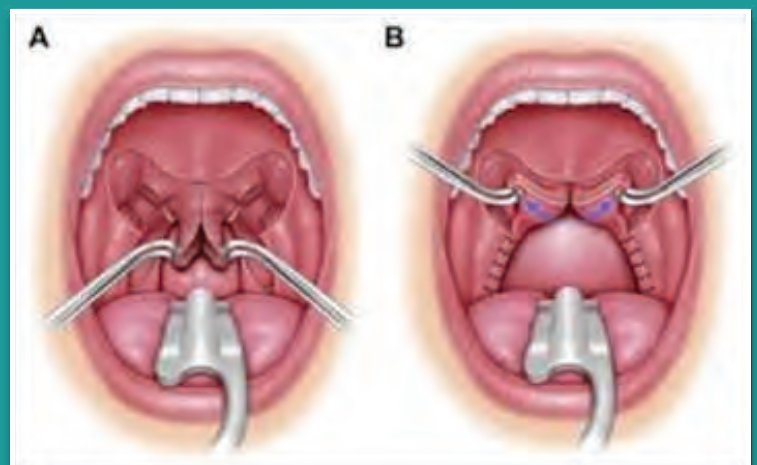


4. **Coblation Soft Palate Channelling** is a fast and easy, minimally invasive, reduction of the soft palate tissue performed as an in-office procedure under local anaesthesia. It usually takes 2 - 3 treatments to reduce patient snoring with treatment procedures done 6 - 8 weeks apart.



5. **Expansion Pharyngoplasty** enlarges and reshapes the upper airway at the level of the soft palate and throat muscles. This surgical approach targets areas of the throat that are prone to collapse during sleep, contributing to breathing difficulties.

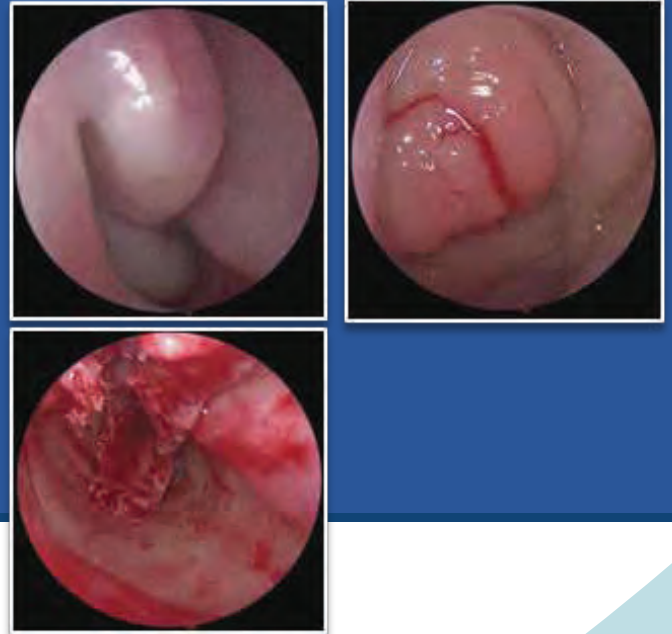
6. **Advancement Palatoplasty** is a surgical procedure used to treat OSA caused by a narrow or collapsible palate. During the procedure, the soft palate is repositioned or advanced forward to increase the size of the airway and reduce obstruction during sleep.





7. **Nasal Valve Surgery** refers to procedures aimed at correcting issues with the nasal valves, which are narrow passages inside the nose responsible for airflow regulation. These surgeries can involve techniques to strengthen, widen, or reconstruct the nasal valves to improve nasal breathing. An **Augmentation Rhinoplasty** may be required to comprehensively address structural issues related to a nasal valve collapse.

8. **Minimally Invasive Powered Endoscopic Turbinoplasty (MIPET)** involves the use of an endoscope and powered instruments to precisely reduce the size of the turbinate by 50% to create space albeit preserving its function, which is to help humidify and filter air in the nose. Among the wide range of turbinate procedures offered, Dr Basheeth performs MIPET using microdebriders or coblation devices to remove excess tissue while minimising trauma to surrounding tissues, resulting in potentially quick recovery times.



9. **Lingual Tonsillectomy** removes the lingual tonsils located at the base of the tongue. During the procedure, the surgeon accesses the lingual tonsils either through the mouth or using a minimally invasive technique such as **Transoral Robotic Surgery (TORS)**. Dr Basheeth performs TORS for various throat conditions including cancer, as well as for sleep apnoea by addressing the anatomy of the upper airway, particularly the tongue base and the soft palate.



10. **Coblation Tongue Base Reduction** is the removal of tongue base tissue via a minimally invasive treatment for obstruction in the oropharynx. This method is indicated for patients with a markedly enlarged tongue or a tongue that is shifted backwards causing restricted airflow. It is performed as a stand-alone outpatient procedure or in conjunction with other procedures such as CAUP.

11. Coblation Turbinate Reduction focuses on permanently reducing the overall size of the turbinates through tissue ablation or removal. It is typically recommended for patients with more severe nasal obstruction or those who have not responded adequately to conservative treatments. **Coblation Turbinate Channelling**, on the other hand, reduces the size of the turbinates by creating controlled channels or modifications in the turbinate tissue.



12. SMILE (Submucosal Minimally Invasive Lingual Excision) addresses the anatomical factors contributing to airway obstruction at the base of the tongue. It reduces the volume of obstructive tissue in the tongue base, thereby improving airway patency and reducing symptoms of obstructive sleep apnoea. SMILE typically results in reduced postoperative pain, faster recovery times, and lower risk of complications. Surgeons may use specialised tools such as lasers or coblation devices to perform tissue removal with minimal trauma to surrounding tissues.



DR *Naveed* BASHEETH

Consultant Otolaryngologist, Head & Neck, Thyroid & Parathyroid, Sialendoscopist, Advanced Facial Plastics, Microvascular & Robotic Surgeon
MBBS, MRCSI, MMedSc, DO-HNS, FEOBOL-HNS, FRCS (ORL-HNS), FGOLF (IFHNOS-MSKCC), CCT (UK&Ireland), IBCFPRS

Fellowships:

Advanced Head and Neck Surgery (Tata Memorial, Mumbai, India and Cambridge University-Addenbrookes-UK)

Advanced Head and Neck Microvascular Reconstruction, Robotic Surgery and Advanced Facial Plastic Surgery (Dalhousie University, Halifax, NS, Canada).

ENT Central, Crest Hospital, Central Healthcare,
Palmerston North, New Zealand

REFERRAL PATHWAY

We provide Online consultations within two weeks of referral for out-of-town residents. Relevant investigations, radiological and laboratory can be undertaken in the patient's city.

Referral → In person / Online consultation / Radiological Investigations in patient's city → Treatment Planning through Online Consult → Fly in ➡ Procedure - One Night Stay - Fly out ➡

Private and outsourced referrals can be sent to admin@entcentral.co.nz

For more information, please visit www.entcentral.co.nz | www.drnavedbasheeth.co.nz