

# A Guide to Snoring and Sleep Apnoea Appliances @ the dental gallery

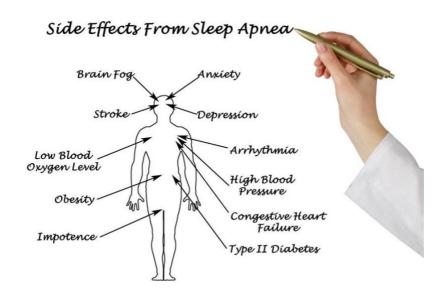
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Thank you for considering having a dental sleep appliance (Mandibular Advancement Splint) produced at the dental gallery. This guide is to give you an overview of Oral Appliance Therapy and the process involved, as well as answer the most frequently asked questions we receive about this to manage sleep.

Some people suffer from a lack of energy, daytime tiredness and being excessively sleepy as a result of having fragmented sleep. They also have a strain on their relationships due to the snoring at night as well as due to the fact that they are irritable and tired from not having a good night sleep.

Further untreated obstructive sleep apnoea leads to many bad outcomes, as outlined in the following diagram.



#### What are Mandibular Advancement Splints?

A mandibular advancement splint (MAS) is a dental appliance that has been custom made by a trained sleep dentist and fits over your teeth to hold the jaw and tongue forward. It works by preventing your airway from falling back or collapsing while you sleep.



#### What are conditions treated by Mandibular Advancement Splints?

Mandibular Advancement Splints (MAS) is approved for use in patients who have

- Snoring
- Mild to moderate OSA, as an alternative to Continuous Positive Airway Pressure (CPAP).
- Severe OSA and cannot tolerate CPAP. (We suggest these patients should try CPAP before considering oral appliance therapy.)

#### How does an oral appliance work compared to Continuous Positive Airway Pressure?

Continuous Positive Airway Pressure (CPAP) is recognized as the gold standard treatment of obstructive sleep apnoea. Oral Appliances are considered an alternative option to CPAP in mild to moderate sleep apnoea. In severe sleep apnoea, they are only considered as a second line option when a patient cannot tolerate CPAP.

However, it has been estimated that 25-50% of people are unable to tolerate CPAP. A MAS may not reduce obstructive events to the same degree as CPAP but are equal in improving quality of life measures.

Generally, most people need some time to get used to their MAS and require follow up and at times adjustment of their MAS.

#### What are the types of oral appliances and how do they work?

Off the shelf or "bite and boil" appliance bought online from a Pharmacy or over the counter, may be cheaper however are not recommended as an option to treat obstructive sleep apnoea. These devices do not fit properly and cannot be adequately adjusted to treat obstructive sleep apnoea. A poor outcome with one of these "off the shelf" appliances does not predict the outcome as compared with a custom-made device.

A custom-made oral appliance is a medical device that has been proven to work to treat obstructive sleep apnoea. These open the airway by:

- Repositioning the lower jaw, tongue, soft palate and uvula
- · Stabilising the lower jaw and tongue
- Increasing the muscle tone of the tongue





#### **Adjunctive Therapies**

At the dental gallery we also advocate the use of **myofunctional therapy** in addition to using a MAS. Myofunctional therapy incorporates an individualized plan of exercises which are designed to increase the tone of your oral muscles. Recent studies have shown that this type of therapy can help with managing OSA.

#### What can you expect with an oral appliance?

Advantages of oral appliances:

- They are comfortable and easy to wear. Most people find that it only takes a couple of weeks to get used to wearing their appliance.
- Oral appliances are small and convenient making them easy to carry when traveling.
- Treatment with oral appliances is reversible and non-invasive

#### Side effects or complications of oral appliances

Short-term side effects of MAS may include

- Excessive drooling or salivation
- Some difficulty swallowing when the appliance is in your mouth
- · Sore jaws or teeth
- Jaw joint or TMJ pain
- Dry mouth
- Painful gums
- · Loosening of teeth
- Short-term changes in the way your teeth meet or your bite
- There are also reports of dislodgement of ill-fitting dental restorations

Most of these side effects are minor and resolve quickly on their own or with minor adjustment of the appliance. The dental gallery will also give you some information about how to minimise the above complications.

Long-term complications cause permanent changes to your bite as a result of tooth movement or jaw joint repositioning. These complications may or may not be fully reversible once oral appliance therapy is discontinued. There have not been any cases documented where this has caused significant long-term impact. Despite these limitations, generally most people find that an oral appliance is more comfortable and convenient than CPAP.

#### Will an oral appliance work for you?

As with most treatments, it is difficult to predict how an individual will respond to oral appliance therapy and until you use it, no one can say with certainty how well it will work for you. Some people respond better than others. It is important for you to use a dentist who has completed further post graduate qualifications in dental sleep medicine (such as Dr Gonsalvez).



Some good predictors of treatment success include:

- If you have mild to moderate sleep apnoea, then an oral appliance maybe a good alternative to CPAP.
- For people who find that their sleep apnoea is better controlled if they lie on their side as opposed to sleeping on their back.
- If your facial structure has a lower jaw that is stepped a little back from the upper jaw, then an oral appliance may be beneficial as it brings the lower jaw forward.

In the following situations an oral appliance may not provide a successful outcome.

- In very overweight individuals an oral appliance, a MAS is less successful.
- If you have very severe OSA,
- In people with central sleep apnoea, a MAS will almost certainly not work.
- If you have a tight jaw joint, then a MAS may not be to provide sufficient advancement of the lower jaw.
- If you do not have teeth or not enough teeth for the MAS to attach to.

#### What is the process of getting an oral appliance?

**Step 1:** To get an oral appliance for snoring or sleep apnoea, you need to have had a sleep study done.

If you have NOT had a sleep study done but you have been told you snore or stop breathing at night or are tired and sleepy during the day or are generally concerned about your sleep quality, please contact us to organise a consultation with one of our dentists first to facilitate how this can be done in the convenience of your home.

If you already have had a sleep study and are medically suitable for oral appliance therapy or have been recommended to have a sleep appliance made or have trialled CPAP and have not been able to tolerate the CPAP then:

• Please book with Dr Gonsalvez for an initial consultation. She will review your medical and sleep history, and sleep study results. She will check that there are no teeth, periodontal (gum and bone), jaw joint and muscle conditions that will impact on the support and comfort of the appliance. She will go through the process of informed consent and answer any questions you may have about your treatment. At this appointment, the most appropriate appliance can be selected, and a subsequent appointment will be made to take dental records. You will be given a quote for your MAS and private insurance items codes.

Initial Consultation cost with Dr Gonsalvez is \$90. (Item code 015)

#### Step 2:

Dental appointment to collect dental records include photographs, taking and review of the radiographs, scans and bite taking (Item codes claimable are 071\*2, 073, 072, 033, 036, 037, 963 and 964) With the addition of the latest technology like the intra oral scanner, the uncomfortable process of taking impressions has been eliminated. With an intra oral scanner a camera is used as shown to take a scan of the teeth and soft tissues. The digital file is then sent to the laboratories and a 3D model is printed and your customised MAS is constructed on those 3D printed models. The introduction of this process has increased the accuracy and the comfort of having the appliance made.







#### Step 3: Fitting of MAS

Usually 3 weeks after record taking, your custom-made MAS appliance is ready to be fitted. At this appointment, Dr Gonsalvez will ensure the fit, and discuss instructions for the care and adjustment of your splint. She will go through a customised protocol to ensure you get the best outcome from your appliance. You will be given your detailed instructions on how to care for your oral appliance including home-selfcare regime and adjunctive therapies. (The item numbers claimable are 984)

#### Step 4: Review

This occurs one week after the fitting and then 3-4 weeks later. During this appointment Dr Gonsalvez will review how the appliance is working and make any necessary adjustments. Snoring can be the first symptom to be significantly reduced or eliminated; it may require further adjustments to optimize sleep, energy and daytime symptoms. It does not always follow that a subjective improvement in snoring and other symptoms equals effective treatment of OSA.

#### **Step 5:** Referral back to sleep specialist for assessment.

When appropriate, Dr Gonsalvez will refer you back to your sleep physician (Usually after the sleep appliance has been appropriately adjusted. Your sleep physician will guide you if you require a follow up sleep study to ensure that the appliance is working effectively. With the support of our visiting Medical Practitioner Dr Roy Kumar, we can triage and manage other issues that could be contributing to your poor sleep.

#### Regular Review

Once it has been confirmed that your appliance is effective, it is recommended you return every 6 months for the first year, and then once a year thereafter. This is to assess for any side effects including bite changes and ensure that your appliance continues to work optimally.

It is recommended that you have your teeth professionally cleaned twice a year as conditions like gum (periodontal) disease and dental infections can affect the life of your appliance. We advise that you maintain good oral hygiene, as this will maximize the life of your appliance. This includes regular twice brushing and flossing of your teeth.



## More about the dental gallery and its team, Dr Roy Kumar and Dr Nomita Gonsalvez in the management of Snoring and Obstructive Sleep Apnoea

The dental gallery is the only practice in the western suburbs of Melbourne offering a holistic approach to diagnosis and management of sleep disordered breathing. The combined expertise of a Medical GP (Dr Roy Kumar) and a dentist (Dr Nomita Gonsalvez) trained in Sleep Medicine ensures patients are managed appropriately at a primary care level. Sleep disorders are complex, and most patients need a team approach where multiple causes of the problem are addressed. Sadly, many patients with sleep disordered breathing are not able to access appropriate advice and care. At the dental gallery we have a team who can personalise management and help you access the care you need.

#### **Dr Roy Kumar**



Has a special interest in sleep medicine has completed many training courses in this area and is a member of the Australian Sleep Association. In addition to be a practising general practitioner (GP), he is Medical Educator with Eastern Victorian General Practice training (EVGPT) and assesses doctors who are training to be general practitioners.

Dr Kumar completed his Medical degree at Monash University in 1995 and is a Fellow of the Australian College of General Practitioners. In 2016 he also completed Post graduate Diploma of Child Health from the University of Sydney.

#### **Dr Nomita Gonsalvez**



Dr Gonsalvez's interest in managing snoring and sleep apnoea started through first-hand experience within her family. She went on to complete the Post Graduate Diploma in Dental Sleep Medicine (from the University of Western Australia) and was the first Victorian based dentist to complete this program.

She is a member of the Australia Sleep Association and on the educational committee of the Australian Chapter of the American Association of Craniofacial Pain and works to organize education events for dentists in sleep and craniofacial pain. She continues to attend training courses in dental sleep medicine and is a certified provider of both Oventus and Somnomed Mandibular advancement splints.

Dr Gonsalvez completed her Bachelor Dental Science from the University of Melbourne in 1998 and graduated with second highest mark. At dental school she was awarded the Ernest Joske Prize & the Royal Dental Hospital Auxiliary prizes. In 2000 she passed the first part of the Royal Australian College of Dental Surgeons (RACDS) exam.

She is trained in oral myology and believes in taking a holistic approach to managing snoring, sleep apnoea and craniofacial pain.



### About the dental gallery

Established in Point Cook in 2004, the dental gallery has been at the forefront of delivering innovative, high quality holistic dental services. Our experienced dentists and oral health therapist provide a comprehensive range of services and have treated over 14,000 local residents. Our goal is to empower our clients towards achieving total health beyond their teeth and mouth.

In August 2015 we became the first and only dental practice in the Point Cook area to have attained QIP Dental Practice Accreditation. This process involves an independent assessment of all aspects of our clinic such as infection control, practice protocols and safety against standards set by the Australian Dental Association (ADA).

We participate in the Australian Government's Child Dental Benefits Scheme (CDBS) and accept all private insurance funds and offer HICAPS billing and payment plans.



We look forward to helping you achieve better sleep, health and well-being.