Snoring and the dentist’s role

Neel Kothari discusses ways to help patients with snoring issues

Whilst dentists most commonly treat conditions related to dental diseases, we are also in an ideal position to screen for and treat a range of sleep related breathing disorders, such as snoring and mild obstructive sleep apnoea. Whilst many of our patients are able to adapt to these conditions in the milder forms, for others these sleep related breathing disorders are a source of great distress and in reality may have more serious medical and social implications, both for the person who snores and/or for the sleeping partner.

Snoring and obstructive sleep apnoea are chronic conditions termed “sleep related breathing disorders”. Snoring is primarily caused by restricted air flow as we breathe. In a small number of cases the restriction occurs in the nose or as a result of an enlarged uvula, but more commonly snoring comes from the back of the throat in the area known as the oropharynx or hypopharynx.

During sleep the tongue drops back and the muscles below the jaw relax. This leads to a restriction of air flow. As the air passes through the smaller aperture its velocity increases and the soft tissues vibrate, giving rise to the snoring sound. The snorer has to work extra hard to overcome the air resistance, often depriving the individual of vital oxygen. This places a strain on the respiratory and cardiovascular systems.

In the case of obstructive sleep apnoea, the airway is temporarily cut off with total collapse of the tissues. Breathing momentarily stops. The carbon dioxide levels rise and the oxygen levels fall until the body’s natural emergency recovery kicks in, the pulse quickens and with a gasp the breathing commences. This cycle of events is often described by the sleeping partner as: “the breathing stops and there are terrible pauses and delays followed by a choking gasping sound. This cycle is repeated throughout the night.” To the sleeping partner it can be most distressing, noisy and alarming. Few can tolerate this and often in desperation retreat to another room. For the sufferer they may temporarily wake up, regain their breath and then go back to sleep.

Dr Simon Ash, consultant orthodontist at Whipps Cross University Hospital has considerable experience working within a multidisciplinary team helping patients with sleep related disorders.

Snoring can be a problem
breathing disorders and says: “We all know that a disturbed
night's sleep is very debilitating.

The unfortunate patient may
report poor sleep quality being
continuously drowsy and tired
and all of these symptoms should
sound alarm bells to the den-
tist. Guides to diagnosis include
looking for factors that make the
condition worse such as weight
gain, lying on the back during
sleep and the taking of muscle
relaxants which includes alco-
hol. Factors that give relief to the
symptoms such as weight loss,
avoidance of alcohol and postural
changes in sleeping position will
not only help in treatment but
also support the diagnosis... A
sleep study undertaken by the
chest physicians is un-"...the
cclusive acid test.”

Dr Ash's management of ob-
structive sleep apnoea consists of
a multi-disciplinary team rang-
ing from fields including chest
medicine, ENT and Orthodon-
tics or a dentist with appropria-
te training and skills. Several
methods of treatment are avail-
able, most importantly changes
in life style, less alcohol, weight
loss and increased exercise; how-
ever Dr Ash believes that sur-
gery, such as laser assisted uva-
lopalatoplasty should be the last
resort, as it may lead to scarring,
restricted space and is generally
excruciatingly painful over the
weeks in the recovery period.

Dr Ash says: “We must be
careful to ensure that dentists
work with the medical physi-
cians and within their limits, thus
whilst dentists should screen pa-
tients and ask two very simple
questions, ie “do you snore” and

Of the non-surgical ap-
proaches, the Continuous Posi-
tive Air Pressure (CPAP) ap-
pliances are the gold standard,
normally prescribed by the chest
physicians. These devices consist
of a close fitting face mask cov-
ering the mouth and nose, con-
ected by a flexible hose to an air
pump which delivers air under a
set pressure. This device forces
air through the restricted air-
way during sleep. Whilst CPAP is
effective, the discomfort and in-
convenience it causes to the pa-
tient mean that many find CPAP
to be intolerable and prefer to
suffer the consequences than
wear the mask.

The most effective alternative
or complementary treatment to
CPAP is treatment using man-
dibular advancement dental ap-
pliances. These appliances work
by holding the jaw forward in the
recovery position during sleep
and it is here where dentists with
appropriate training are ideally
placed to assist our specialist
colleagues in the management
of these conditions. In the next
article I will be looking in more
detail about some of the options
that are used to treat snoring,
such as mandibular advance-
ment splints, how they work and
what options are currently on the
market! [2]