A good night’s sleep
Matt Everatt discusses some solutions to snoring and bruxism

Snoring and bruxism are common problems frequently experienced during the night by most people in the UK, yet they not only result in problems for the individual, they can also cause those who share a bed or a house with them to have their sleep disrupted frequently.

Snoring is mainly caused by the partial closure of the airway during sleep. As the neck muscles relax, the soft tissue in the upper throat vibrates creating the harsh sound known as snoring.

Those who are overweight are more vulnerable to snoring, as are those who are older as the throat muscles become weaker with age. In some people, drinking alcohol can cause further relaxation in the neck and throat, resulting in snoring, and in others it is merely a result of the shape of their airways. However, no matter the reason, snoring is more harmful than it otherwise appears. Hypertension, cardiovascular disease, diabetes and high cholesterol are all more common in snorers, but it is the sleeping issues that can be most detrimental.

Many snorers suffer daytime sleepiness as a result of Obstructive Sleep Apnoea (OSA), in extreme situations this sleep deprivation can result in the sufferer inadvertently falling asleep with little warning, which can of course be incredibly dangerous. OSA occurs when breathing briefly ceases during sleep. These interruptions occur when the airway narrows so much that it closes, reducing the oxygen level in the blood. Adrenaline is then released into the body, sometimes partially weakening the sleeper without their knowledge. In severe cases of OSA, Continuous Positive Air Pressure (CPAP) is used to pump filtered humidified air into the nose to prevent the upper airway from collapsing.

Where snoring is concerned, patients should be screened in order to eliminate the possibility that they could be suffering with OSA. The most effective solution for simple snoring is a mandibular advancement splint (MAS). Worn during sleep, these are designed to hold the lower jaw slightly forward to reduce the chance of the airway narrowing.

Although snoring is a main cause of sleep disruption for most people, bruxism is more damaging to the individual. Whereas snoring is the result of muscle relaxation, bruxism is the result of muscle tension.

Bruxism is a type of parasomnial hyper-activity that can cause a range of painful symptoms including poor sleep quality, migraines, tinnitus, neck ache, TMD and even depression. It can also lead to excess erosion of the teeth causing related dental problems, such as stress fractures, broken cusps and abstractions. A lack of motor control during sleep causes the nociceptive trigeminal inhibition (NTI) reflex to be overridden, for many people at stressful times in their lives the effects of bruxism can be exacerbated, what’s more, as this is most commonly a nocturnal issue, patients are usually unaware of the cause of their problems and it often goes undiagnosed and therefore, untreated.

The effects of bruxism can be reduced with the implementation of an occlusal splint. The most effective splints not only inhibit nociception by keeping the canines and molars separated, but also trigger the NTI reflex, forcing the muscles to relax and physically preventing the damaging clenching action, as opposed to the most commonly used full arch soft splints, which can often be uncomfortable to wear and not always effective as they can still permit and in some cases actually increase clenching.

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