

When Patients Fall Asleep in the Dental Chair — A Wake-up Call for Dentists

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© J Can Dent Assoc 2003; 69(1):14–5

Excessive daytime sleepiness (EDS) can be a symptom of several underlying disorders. Dental professionals are in a unique position to observe and recognize EDS in their patients. Recognizing EDS and referring patients for diagnosis can be life-saving. Dentists can also be involved in the treatment of some disorders associated with EDS.

What should we think of a patient who dozes off in the waiting room or a treatment chair? As health providers, should we be concerned?

Possible scenarios for patients who fall asleep at the dental office range from situations where patients may be acutely fatigued and simply “catching up” in a comfortable environment to situations where patients may be chronically sleepy and suffering from a pathologic and treatable condition.

Sleepiness occurs in 5% to 13% of the general population.¹ Falling asleep in the dental environment may be a sign of EDS. Common causes of EDS are listed in **Table 1**.²

Why should we be concerned about sleepy patients? Patients who are chronically sleepy are a danger to themselves and others. A few moments of careful consultation could enable dentists to direct patients with EDS toward treatment that might improve quality of life, decrease cardiovascular morbidity and, ultimately, save lives. These are high expectations for a brief consultation.

Sleep deprivation has become common in society. Many people are chronically fatigued. Patients who are sleepy put their own lives and the lives of others at risk. When patients with EDS drive or operate machinery, chances of accidents increase. A person who stays awake for 24 hours has the performance equivalence of a person with a blood alcohol level of 0.10%.³

Obstructive sleep apnea (OSA) is one of the most common causes of daytime sleepiness. OSA is characterized by repetitive interruptions of breathing during sleep. Interruptions are usually scored as obstructive events if they

last more than 10 seconds and result in an arousal, an oxygen desaturation of more than 3% or a 50% decrease in a valid measure of breathing during sleep.⁴ OSA is present in 4% to 6% of adults and carries a risk of increased cardiovascular disease.^{5,6} While stereotypically associated with obese, middle-aged men, OSA regularly occurs in all body types of both sexes.

EDS may be the presenting symptom of sleep deprivation and OSA as well as other conditions, including depression, insomnia, central sleep apnea, upper airway resistance syndrome, snoring (either by the patient or the bed partner) and narcolepsy.

Although dentists are not trained to diagnose sleep disorders, they are in a unique position as health professionals to recognize patients who suffer from these conditions. Many patients, who would not see a physician for years, will visit their dentist with some regularity. When a patient falls asleep in the waiting room, the hygienist's chair or the dentist's chair, awareness of sleep disorders on the part of the dentist means the patient may receive much needed help.

The Epworth Sleepiness Scale (ESS) is a widely used screening tool for assessing sleepiness. Patients are queried as to how likely they would doze off or fall asleep under a variety of scenarios. These scales are subject to significant bias if patients perceive an advantage to appearing more or less sleepy. Historically, sleepiness has been documented using tests to determine how quickly patients fall asleep when allowed to nap (multiple sleep latency test, or MSLT) or how long they can stay awake in a quiet room (maintenance of wakefulness test, or MWT). None of these measures is accepted as diagnostic and all have their proponents and critics. Patients with complaints of sleepiness, snoring or sleep problems should be referred to their primary physician for assessment.

Many physicians will assess patients overnight in a sleep laboratory using a polysomnogram (PSG). The PSG is a multichannel record of sleep consisting of an electroen-

Table 1 Causes of excessive daytime sleepiness (EDS)²

Insufficient sleep syndrome or sleep deprivation
Sleep apnea syndrome (including upper airway resistance syndrome)
Sedating medications
Withdrawal from stimulants
Narcolepsy
Psychiatric disorders
Idiopathic hypersomnia

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cephalogram, an electro-oculogram and an electromyogram as well as a recording of the patient’s pulse, respiration and sound.

In some cases, either the family physician or the sleep specialist will screen patients for OSA with a portable sleep device. This non-invasive home test, validated by comparison to sleep laboratory testing, can be a first or final step in a patient’s road to treatment for the cause of EDS.⁷

For patients with OSA, oral appliances are an appropriate first-line therapy if they suffer from mild to moderate OSA. Treating these patients with oral appliances can be an extremely satisfying addition to a dental practice and can result in tremendous positive changes in their quality of life.

A patient who falls asleep in the dental office may be presenting the dentist with a vital clue as to his or her health. Armed with knowledge of EDS, the dentist can play a role in guiding that patient toward crucial treatment.

Dentists who wish to learn more about sleep disordered breathing and oral appliances can visit the Web site of the Academy of Dental Sleep Medicine at www.dentalsleepmed.org. ♦

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The views expressed are those of the author and do not necessarily reflect the opinions or official policies of the Canadian Dental Association.

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