Peter Kalantzis suffered from sleep apnea and died at 36. Connor Deegan was 11, with violent behavior and failing in school when his hidden airway/sleep disorder (ASD) was uncovered—and treated. Connor’s life changed. He no longer exhibits aggressive outbursts and now is getting A’s and B’s.

Connor’s mother, Valerie, and Peter’s sister, Anna, are two of the devoted board members of Foundation for Airway Health (FAH), a nonprofit dedicated to raising public and practitioner awareness about airway/sleep disorders. They are two of the passionate missionaries working to save lives and human potential—and they need your help.

Fifty percent of patients seen at a dental practice may have an airway/sleep disorder. How many of them can you identify? How many of them are you recognizing? We use the term “airway/sleep disorders” because airway is more than sleep and sleep is more than airway.

ASD is a major public health issue. It is pervasive, affecting all corners of our society. We call it a “hidden problem.” Often unrecognized, ASD can be expressed in many ways: as chronic disease and systemic inflammation, as behavior and mental health problems, and as learning and performance difficulties.

Patients and their families suffering with these problems rarely have their possible ASD issues screened, let alone diagnosed and treated. The current interest in sleep is the beginning of a paradigm shift in dentistry and health care. As dentists and hygienists, you are uniquely positioned to be leaders for change.

Breathing is the most prioritized physiological function. The air we require for life enters only through the nose and mouth. You are spending time looking at every patient’s airway, every day. Whether you know it or not, you are changing patients’ airways and their physiology for better or worse.

It is estimated that currently only 15 to 20 percent of patients with sleep disorders are diagnosed. This number does not include those whose structures and physiological function will cause future problems.

The good news is, there is no need to raise millions of dollars to find a cure or prevention for ASD. Successful treatment already exists. Public and health-care practitioners to uncover the “hidden airway problem,” and to raise awareness among patients and practitioners.

Several years ago, FAH board member Dr. Michael Gelb coined the term “AirwayCentric” to reflect his belief in a paradigm shift where the development, protection and restoration of the airway becomes a priority, and diagnosis and treatment happen in collaboration, across disciplines.

Treatment does not end with the delivery of a sleep appliance. Restorative, orthodontic and even periodontal treatment must include an airway/sleep assessment and if necessary, treatment.

How to begin: start identifying ASD patients tomorrow

The airway can be restricted by the structure and function of the nose and mouth. The first step is for
dentists and hygienists to screen for airway/sleep disorders. It could be as easy as asking a few more questions and keeping an eye open for obvious physiological problems.

**Look at health history and medications with new eyes**

Common comorbidities of airway/sleep disorders are cardiac arrhythmias and other cardiovascular problems, high blood pressure, type 2 diabetes, nocturia, obesity, and anxiety, among other issues. A patient who presents any of the above comorbidities or who is taking medications for them should be asked about his or her sleep patterns.

**Check physical appearance**

Certain physical characteristics have been associated with snoring and ASD. Don’t be fooled—one does not have to be obese to have an airway/sleep disorder. Even thin children and adults can have small, collapsible airways. The following characteristics are often associated with airway, breathing and sleep disorders.

**Head and neck**
- Large neck: 17 inches for men, 15 inches for women
- Flabby, soft tissue in the neck with a cricomental space
- Retrognathic lower jaw.
- Narrow, high vaulted or retruded maxilla.
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Remember, the tongue is the anterior wall of the airway. Anything that reduces space for the tongue will impact the airway either structurally or functionally. Scalloping of the tongue alone is usually an indication of an airway problem.
Oral airway
- Large scalloped tongue
- Long soft palate or uvula
- Large tonsils and adenoids
- Narrow dental arches
- Restricted lingual frenum
- Mouth breathing
- Deep overbite
- Loss of vertical dimension

Nasal airway
- Narrow nostrils and collapsible external nasal valves
- Enlarged turbinates
- Deviated septum

Use airway questionnaires: STOP-Bang and Epworth
These are scoring forms to identify persons at risk. They are readily available online. Have all patients complete them prior to their appointment. They are a good way to begin a dialogue.

Lifestyle questions and medical history are clues to ASD
Add these questions for new and recall patients; if you can look at patients with new eyes, you’re on your way to being an airway-centered dentist. (Share your results with us on Dentaltown.com.)

Once you begin identifying patients with ASD, you can continue on your journey of learning and providing treatment. Learn more about home and overnight sleep tests, the benefits of CBCT studies for visualizing the airway, nasal cavity, cervical spine and more, and the various types of sleep appliances. Learn about the connection of airway/sleep disorders to chronic inflammation and periodontal disease. Exciting developments using physiological monitoring can provide real-time data to assist the clinician. (See resources listed at the end of the article.)

Remember, we will always compensate and do what is needed to breathe. This might include changing their posture—which can result in neck pain in a state of sympathetic, up-regulated hypervigilance, sleepy, tired and easily distracted, with increased risk for disease, pain, poor performance and troubled relationships.

Accepting your role in how dentistry protects, maintains and restores the airway will change your practice, your life and the lives of your patients. Considering the impact on airway will change your orthodontic, implant and restorative treatment planning. You will think airway first. You will understand that airway, sleep disorders and TMD are related. You will think about how to create a more open airway by expansion orthodontics, expansion and restoring vertical dimension before placing implants. You will understand that treatment does not end with a sleep appliance. It is only the beginning.

You will consult with and refer to physicians, physical therapists, speech language pathologists, myofunctional therapists and other practitioners and they will consult with and refer to you. You will be part of a team that will support the patient’s airway and wellness.

Make airway the priority and you will identify and treat the Peters and Connors of the world, and save and change lives. Please join with and support the FAH. For more information, what is your experience with ASD patients? Comment at Dentaltown.com/magazine.aspx.

Author Bio
Howard G. Hindin is codirector of the Hindin Center for Whole Health Dentistry, a general practice with a focus on TMD, chronic pain and sleep disorders. He is a founder and board member of the American Academy of Physiological Medicine and Dentistry (AAPMD), and the Foundation for Airway Health (FAH). He and Michael Gelb created AirwayCentric, providing education, training and products related to airway health.

Signs and symptoms of ASD
| Reflux or Heartburn | Daytime sleepiness or fatigue |
| Snoring | Night Sweating |
| Difficulty focusing (ADHD) | Morning headache |
| Nocturia | Restless sleep |
| Weight gain | Tooth grinding |
| Poor memory | Insulin resistance |
| Irritability | Impotence |
| Increased appetite | Chronic pain |
| Loss of intimacy | Depression or anxiety |
| High blood pressure | Cardiovascular disease |
| Cardiac arrhythmias | |