Certainly, as Rondeau mentioned, all dental professionals must begin asking the right questions during their initial exams. Whether it is an Epworth Sleep Scale, or the STOP-Bang test, or just a few questions, we should all be screening for sleep apnea.

In a typical orthodontic office, we have access to view a lateral head film (cephalometric X-ray). A lateral view can be seen to observe the airway from a sagittal view. When a dentist examines a patient and finds positive answers to sleep questions along with a mandibular deficiency, they can begin a differential diagnosis to go along with neck size, weight, blood pressure, sleep pattern and excessive tooth wear that means maybe—just maybe—there is a skeletal component to the patient's issues.

## **Case studies**

As examples, here are pretreatment and post-treatment cephs of two patients.

The first is a 7-year-old male who presented to my office with a Class II, Division 2 skeletal and dental malocclusion (Fig. 1). He was a typical, active boy, but discussed how he often felt tired in the morning and his mother noted heavy breathing and snoring. Nothing was mentioned about *evaluating* the tiredness, so we went ahead and began Phase I interceptive orthodontic therapy with a Class II functional appliance.

Interestingly enough, a Class II functional appliance looks very similar to a sleep appliance used for oral appliance therapy (OAT). After a few weeks of wear, the patient told his mother that he was feeling more rested and slept better. The progress ceph (Fig. 2) clearly demonstrates the now-larger airway after his Twin Block therapy.

An informal study in my office resulted in about 60% of the preadolescent skeletal Class II patients noted feeling better and more rested. After Class II correction, one parent in particular went into great detail to describe how it changed her daughter's life in personality, school and even digestion. She said her daughter was less agitated and was more tolerable to be around.

Fig. 3 (p. 84) shows a 39-year-old male whose chief complaint was his upper teeth stuck out. He was a significant skeletal and dental Class II, Division 1 malocclusion with a hypodivergent skeletal deep-bite pattern.

We removed the lower first bicuspids and set him up for a bilateral sagittal split-radial osteotomy, a mandibular advancement. At the time I did not ask the right questions, but his neck size was certainly more than 17 inches. He was obese, and little did I know, he was sleeping in a separate room from his wife because of his snoring.







## Wide awake for more sleep apnea info?

Thinking about getting into sleep medicine but not sure where to start, or just want to learn more about the treatment options or benefits to you and your patients? Head to **dentaltown.com** and search "sleep apnea" for articles, CE courses, podcasts and more on the topic!