

## **Breathing Problems, Sleep Disorders and ADHD**

By Arthur M. Strauss, DDS

According to a New York Times wellness blog, Kate Murphy posted, "Many children are given a diagnosis of ADHD, researchers say, when in fact they have another problem: a sleep disorder, like sleep apnea. The confusion may account for a significant number of A.D.H.D. cases in children, and the drugs used to treat them may only be exacerbating the problem."

In a recent study of 11,000 British children, where their sleep was affected by breathing problems like snoring, mouth breathing or apnea, showed they were 40 to 100 percent more likely than normal breathers to develop behavioral problems resembling ADHD.

Ms. Murphy added that, after their adenoids and tonsils were removed, children were "significantly less likely than untreated children with sleep-disordered breathing to be given an ADHD diagnosis in the ensuing months and years."

This is not the only factor to consider. The tonsils are a component of the airway that influence airflow and our ability to breathe, and ADHD behavior is while the child is awake, so the broader perspective is that this as an airway problem affecting us round-the-clock.

Then, take into account the "oral component" of the airway, namely, the tongue relation to the throat. This is influenced by the posture, position, size and shape of the jaws, which make up the mouth, which houses and controls the posture and position of the tongue. Add to this the changes in tongue space in the mouth as a child's baby teeth come in and are replaced by larger adult teeth.

Consider the reaction we have to a compromised airway – when we can't breathe. It causes a "flight or fight", "Adrenaline" or "Stress" response that forces us to awakenings during sleep, or do whatever we need to, to keep the airway open, and oxygen flowing. This has an impact on all behavior including the ability to sleep, quality of sleep and behavior while awake, including what we diagnose as ADHD.

Keeping the airway open is more important than sleep and attention problems as ADHD. These are from the effects of adrenaline type hormones of the stress response to compensate for diminished airflow not the origin, which is "the jaw-tongue-throat portion of the airway, a major influencing component of which is dental.

The relation of dental structures in your mouth, including your teeth, jaws and tongue, must be understood to see how they impact sleep, sleep apnea and behavior. Through fully integrating the cooperation between medicine and dentistry we can do a better job of helping people with breathing and sleep problems, to improve quality of life.