

Sleep Apnea

What is obstructive sleep apnea (OSA)?

OSA is a breathing disorder during sleep that is characterized by complete or partial episodes of upper airway obstruction that disrupt normal ventilation and sleep patterns. OSA occurs in 2-4% of infants and children and can occur at any age.

What are the causes?

The most common cause of OSA in children is enlarged tonsils and/or adenoids. Other risk factors for OSA include obesity, craniofacial abnormalities and neuromuscular disorders.

What are the symptoms?

OSA is very unlikely without nightly snoring. The snoring is often associated with pauses, gasps or snorts. You may also see disturbed sleep and daytime neurobehavioral problems. The obstructive pattern of breathing seen in OSA is typically worse during rapid eye movement sleep, which commonly occurs in the early morning hours. Excessive daytime sleepiness, a hallmark of OSA in adults, is uncommon in young children with OSA.

What are some complications of OSA?

Complications of OSA include neurocognitive impairment, behavioral problems, failure to thrive and in severe cases, heart problems. The complications are usually reversible with treatment.

Can snoring be normal?

Yes, 3-12% of all school age children snore but do not have obstructive sleep apnea. This is called habitual snoring. It can be difficult to distinguish habitual snorers from those who have OSA even after your physician obtains a thorough history and performs physical examination.

How is OSA diagnosed?

The best diagnostic test currently available is nocturnal polysomnography (sleep study). Sleep studies are used to diagnose OSA and determine the severity if present. Sleep studies are non-invasive and are usually done in a sleep laboratory with a certified sleep technologist in attendance.

What is the treatment?

Removal of the adenoids and/or tonsils is the most common treatment for OSA in children and is usually curative. For children in whom adenotonsillectomy is not an option or when the problem persists even after surgery non-invasive ventilatory support can be an option. This can be done with bi-level positive airway pressure delivered through a mask over the nose or nose and mouth while the child is sleeping. Other adjunctive therapies include weight loss (in obese patients) and avoidance of tobacco smoke, allergens and indoor pollutants. Oxygen therapy is used at times but is usually not the first-line therapy.