



A breath of fresh air for childhood problems

Just-for-kids sleep centers pinpoint what's behind all of the tossing, turning and snoring.

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Matt Walicki couldn't get a good night's sleep. Neither could his parents.

Each night, the 10-year-old Buffalo Grove boy tossed and turned and kicked and woke repeatedly, then went to his parents' bed where he'd do it some more.

When his parents asked his doctor about it, they were surprised at the diagnosis: their son, with a history of allergies and throat infections, had enlarged tonsils that blocked his breathing at night.

The boy's tonsils were surgically removed, and according to his mother Joanna, "It's made an amazing difference. He sleeps through the night. He's more focused in school."

Decades after tonsillectomies fell out of favor as a routine treatment for throat infections -- though it is still practiced for recurring cases -- they are back as a cure for sleep disorders in children.

Researchers at the Mayo Clinic estimate that twice as many tonsillectomies were performed in recent years as in the 1970s. In fact, the No. 1 treatment now for children who have trouble breathing while sleeping is to cut out their tonsils.

And as the significance of sleep disorders has become more recognized among adults, it's also being recognized more often in children. Doctors estimate one out of 10 children suffers from some form of sleep disturbance.

Sleep-disordered breathing in particular can produce daytime mood changes, inattention, decreased motivation and hyperactivity. As a result, some doctors say, sleep problems can contribute to or be misdiagnosed as attention deficit disorder.

Sleep apnea, when someone sleeping temporarily stops breathing, isn't just for fat old men

who snore. It affects about 2 percent of children as well.

That's why the American Academy of Pediatrics is recommending that doctors screen all children for snoring and other problems sleeping.

And new sleep laboratories in the Chicago area are testing children to figure out why Johnny is grumpy and sleepy -- and whether he needs to give up his tonsils.

Polysomnography

In a small office in Streamwood, children are trying to sleep. While parents stay in an adjoining room, kids lie in brightly colored bedrooms decorated with butterflies and surfer dudes.

Small sensors are taped to their heads and limbs. An elastic belt around the chest measures breathing and a finger clip measures oxygen in the blood, while a camera records movement.

Wires lead to a small box transmitting data to a nearby control room.

There, a team of technicians tracks the child's sleep cycles via brainwaves, rapid eye movement, restless limbs, breathing and heart rate, oxygen supply, etc.

In the morning, the polysomnogram will be analyzed to see if the child has sleep-disordered breathing.

Partial airway blockage, for instance, might lead to hypopnea, in which a child gets less than half the normal air flow.

If the child's airway gets blocked completely, it cuts off respiration. The nervous system detects the problem and causes a surge in adrenaline, which raises blood pressure and jolts the sleeper awake.

For children with sleep apnea, this reaction happens again and again, causing long-term problems like hypertension and heart problems.

Finding a diagnosis

Snoring is a frequent symptom of sleep-disordered breathing. In adults, spouses often hear their partners with apnea snort awake as they struggle to resume breathing.

Snoring may be present in children as well, but by itself doesn't reveal whether a child has apnea.

For the most accurate diagnosis of a child's sleep patterns, the American Academy of

Pediatrics recommends a sleep study as the "gold standard."

Children's Memorial Hospital in Chicago was the first in the area to offer a comprehensive sleep center dedicated solely to children.

Now, hospitals such as Lutheran General in Park Ridge, Central DuPage in Winfield and Edwards in Naperville offer treatment for children as well as adults.

The sleep lab in Streamwood is one of four new Merit Centers for Sleep Health developed in conjunction with Alexian Brothers Hospital Network and the first free-standing lab in the area dedicated solely to children.

The new center should help alleviate a shortage of pediatric sleep labs that creates a monthslong wait to get an appointment.

Sleep studies can cost \$1,000 per night, and some children find it hard to get a typical night's sleep in a new environment hooked up to wires.

Some doctors, like Dr. David Walner, a pediatric ear nose and throat specialist at Lutheran General Hospital in Park Ridge, say parents' observations of their child's sleep at home, combined with a physical exam, can often confirm sleep-disordered breathing.

As another option, some doctors use a home test kit that measures air flow, oxygen and sleeping sounds.

In any case, the doctor will examine the child's throat to see if the tonsils, at the back of the mouth, and the adenoids, behind the nose, are enlarged. If the exam jibes with the sleep history or study, the likely diagnosis is sleep-disordered breathing.

Treatment options

Once diagnosed, there are a variety of treatment options: medication, changes in lifestyle, diet and exercise to lose weight, or wearing a mask that blows in air to keep the airway open during sleep.

But the primary treatment is adenotonsillectomy -- surgical removal of the tonsils and adenoids.

Almond-shaped lymph-like nodes on each side of the throat which fight infection, tonsils can reach the size of golf balls and actually touch in the middle of the throat.

To remove the tonsils, Walner uses a method called coblation therapy, in which a wand emits radio frequencies that separates or dissolves the tissues of the tonsils while bathing them in cool saline. The method causes less heat damage to the throat than the traditional electric

cauterizing method.

Another new technique is known as Powered Intracapsular Tonsillectomy and Adenoidectomy, or PITA, in which 90 percent of the tonsil tissue is removed, but a thin layer is left intact to protect the sensitive throat muscles. One study found it caused about half as many problems with bleeding and pain, though Walner warned there might be complications, such as the tonsils growing back, which he'd like to see addressed in a long-term studies.

In general, the surgery takes about 40 minutes under general anesthesia, and patients are usually sent home a couple of hours later.

Matt Walicki said his throat hurt too much to eat for a few days then got much better, though he is still getting used to the "hollow" feeling in his throat.

Effects

Studies have found that children who had their tonsils removed not only slept better, but did better during the day, with fewer problems concentrating, acting up and being hyperactive.

Dr. Anna Ivanenko, a psychiatrist at Alexian and Central DuPage who specializes in pediatric sleep medicine, says treating a child for sleep disorders can frequently eliminate attention deficit symptoms and the need for medication.

Some children even have a growth spurt after the operation, getting more oxygen and better sleep.

As for cost, the procedure can run \$5,000 and more, and is usually covered by insurance.

Though some studies show an 85 percent success rate, the procedure doesn't always work.

One recent study found that black or obese children tended to relapse into sleep-disordered breathing.

And while tonsillectomy might cure sleep problems for a child, it's no guaranteed cure going into adulthood.

Some patients might still develop sleep apnea as adults due to other factors, such as soft palate obstructions or obesity.

Despite the new attention on sleep disorders among children, health experts believe it is still under-diagnosed by doctors and little known by parents.

One mother of four in Skokie, Hope Miller, thought nothing of her daughter Baye's heavy

snoring until the 11-year-old girl came home from a sleepover after the other girls had made fun of her for snoring.

Walner had Miller watch her child sleep at different times of the night over a week. To her surprise, she heard her daughter gasping for breath at different points throughout the night, and saw her moving restlessly in her bed.

Since having the surgery in December, Miller said, Baye sleeps quietly and soundly, barely moves in bed, gets out of bed much more easily and has more energy.

Now, Miller realizes she had been missing the symptoms of a sleep disorder.

"We assumed that was just how she slept," she said. "I didn't know that fixing it would give her a better quality of life."

Symptoms of breathing problems during sleep

Habitual snoring

Pauses in breathing

Mouth breathing

Coughing

Sweating

Bed-wetting

Restlessness

Source: Dr. David Walner