## MEDICAL **#** SLEEP DISORDERS

## pediatric sleep disorders

by Maryjo Faith Morgan

Sleep can be very exciting, according to Dr. Timothy Ryschon, of the Colorado SleepCenter of the Rockies. In fact, good restful sleep for everyone is his goal. He approaches diagnosing and treating sleeping disorders with the enthusiasm and confidence of one who has seen dramatic results.



Pictured with a Finger Oximeter Monitor, Matthew Lewis, age 5, prepares for a night sleep study at the Colorado SleepCenter of the Rockies.

"Everybody takes sleep for granted. People don't consider how incredibly important the quantity and quality of sleep are for the rest of their lives ... I'm excited about the impact we will have on people's waking moments, those times of memories, relationships and daily living. Sleep, or the lack of it greatly affects the conscious state."

Diagnosing pediatric sleep disorders differs from determining them in adults. Adults with undiagnosed sleep disorders present with prominent symptoms such as insomnia, restless legs syndrome, sleep apnea and/or snoring. In children and adolescents, the clues are often in their daily living. But even dead giveaways are over looked because we are not aware of the connection. Infant/childhood apnea, sleep terrors/nightmares, bedwetting, and rhythmic disorders, are all related in some way to sleep; either through regulation of sleep and wakefulness, disruption of sleep, or being a consequence of disordered sleep.

The case for treating sleep disorders in the young is stronger than many may think. "Fifty percent of adolescents surveyed responded that they have significant sleep issues or problems with daytime alertness," shares Dr. Ryschon. "This is giant-sized! There is not another epidemic of this magnitude in the American population. Fifty percent of the population does not have heart disease. Fifty percent of the population does not have cancer. But fifty percent of our adolescent population is [sleep] impaired. These are the people who need to be learning and developing their brains – and we are leaving them in a semi-rested state."

Dr. Ryschon explains that the dynamic state of neurological development and physical growth in children influences the type of sleep disorders they experience. This influence of disordered sleep and problems with wakefulness are of particular concern in children because they disrupt learning and academic performance. In some cases, sleep disorders create daytime problematic behaviors that are difficult to distinguish from other conditions such as attention deficit hyperactivity disorder (ADHD) and Attention Deficit Disorder (ADD). This makes accurate diagnosis critically important in order to avoid frustrations and long term disillusionment with treatment.

Dr. Terry Himes, a founding partner of Colorado SleepCenter of the Rockies along with Dennis Himes, general manager, says a relatively high proportion of children diagnosed with ADD and ADHD have a sleep disorder as well. Immerging medicine is confirming far more prevalence than realized. "These children present as irritative and having a lack of attention."

Although there is still speculation as to why children with ADHD respond to treatment with stimulant medications, about 70% do experience an increase in focus and an ability to control their own behavior. However, these same kids may experience excessive daytime sleepiness, a sleep disorder indicator, but remain on stimulants; they might benefit from looking into sleep disorders.

Another considerable factor in children can be weight. As a self-described "preventionist," Dr. Ryschon seeks to derail the harmful trajectories of obesity in youth.

"Frequently our goal will be to simply slow the rate of fat accumulation until growth 'catches up,' normalizing the weight risk. In other cases, where weight has accumulated to an extent that will never be safe at any normally achievable height, weight reduction becomes the goal. Our interventions focus on reducing high-risk eating behaviors and modifying leisure-time physical activity levels. We are ever vigilant for serious co-morbidities like high blood pressure, high cholesterol, obstructive sleep apnea, and pre-diabetes and follow these conditions very closely. We are always prepared to resort to technological or pharmacologic interventions if needed. Excess weight is not the only condition associated with serious sleep disturbances, it is just increasingly common.

Dr. Ryschon shares his recent experience with a teenaged patient. "Ted" is an example of an older sleep disordered youth in a diagnostic dilemma. His ADD (Attention Deficit Disorder) was being treated with stimulants and "Ted" was also dangerously overweight, a condition that caused sleep apnea and significantly lowered his quantity and quality of restful sleep.

It seemed stimulants were the wrong answer





in "Ted's" case since his obstructive sleep apnea was related to his weight. In many situations breathing apparatuses such as C-PAP (Continuous Positive Airway Pressure) or BiPAP (Bi-level Positive Airway Pressure) decrease the work of breathing for those with sleep apnea, help get more air into the lungs, and restore restful sleep.

However, "Ted" chose to implement the suggested modification program and was remarkably successful. (Integrated childhood weight management programs are designed to lower the chances of children developing sleep apnea from being overweight as adults. Programs address a range of health conditions that are related to being overweight, including problems with cholesterol, blood pressure, and asthma.) He became significantly more physically active, experienced a reduction in body mass by 40-50 pounds, and his disrupted sleep pattern disappeared. He became a different person.

Dr. Ryschon maintains that we simply do not appreciate how widespread the problem is for children. We all hear parents talk about sleep problems and consign those difficulties as some right of passage; kids are just that way. Everyone's tired. We never think of sleep disturbances as being correctable medical conditions.

As a society we may not yet be immediately aware of sleep disorders in terms of recognition, management and prevention of sleep disorders. Many sleep problems do not require formal sleep studies and can be managed through phone consultation between the primary care provider and sleep specialists, and many medical plans now cover evaluation, diagnosis and treatment. Full service sleep labs like Colorado SleepCenter of the Rockies of the Rockies are offering a combination of treatment with consistent education of parents, children, and our community.

Awareness and education are the keys to good and restful sleep for all.

Maryjo Faith Morgan is a Loveland freelance writer and a member of Colorado Authors' League (www.coloradoauthors.org).

The FDA has recently approved new technology to treat congestive heart failure. Watch for the synergy of Colorado SleepCenter of the Rockies and Heart Center of the Rockies, working in combination for comprehensive cardiac care!

Visit the SleepCenter's website and complete the sleep survey: www.sleepcenterotr.com/ survey.pdf

## Check out these helpful websites:

American Sleep Apnea Association at www.sleepapnea.org American Academy of Sleep Medicine at www.asda.org National Sleep Foundation at www.sleepfoundation.org American Stroke Association at www.strokeassociation.org National Stroke Association (US) at www.stroke.org Heart and Stroke Foundation of Canada at www.heartandstroke.ca Talk About Sleep at www.talkaboutsleep.com