



Children's Hospital
Cleveland Clinic

Treat, Test or Turf?

Screening and Triaging Children with Sleep Disorders

Screening for sleep disorders is challenging in a busy clinic. Answers to these common questions may help in ascertaining whether a sleep study or consult is needed:

When should a sleep disorder be suspected?

Active screening is especially useful in the child with obesity, developmental or neuromuscular disorder, craniofacial abnormality, school failure or behavioral problems. The overall prevalence of sleep apnea is 1 to 3 percent among otherwise normal children, 20 to 30 percent in ADHD, and 50 to 75 percent in Down syndrome. The **BEARS** mnemonic yields significantly more information than a simple “does your child have any sleep problems?” screening question. Positive responses should serve as a flag to delve deeper:

B for Bedtime: Does the child/teen have any problems going to bed and/or falling asleep?

E for Excessive daytime sleepiness: Does the child/teen appear/ feel overtired or sleepy during the day?

A for Awakening during the night: Does the child/teen wake frequently at night and/or struggle to fall back asleep?

R for Regularity of sleep: Does the child/teen have a regular sleep and wake time on weekdays and weekends?

S for Snoring: Does the child/teen snore or have a lot of difficulty breathing at night?

What are the common sleep disorders of childhood?

Like adults, children suffer from insomnia (including bedtime resistance and sleep associations), hypersomnia, sleep apnea, circadian rhythm (biological clock) disorder, limb movement disorders including restless legs syndrome (RLS), and parasomnias.

What are the common indications for a PSG?

A polysomnogram (PSG) is used most often to assess sleep-related breathing disorders (e.g., obstructive or central apneas, hypoventilation), to titrate CPAP or Bi-level PAP, or to assess periodic limb movements. With added full EEG, one may study nocturnal motor phenomena, (e.g., atypical or resistant parasomnia, seizures). Excessive sleepiness may call for a PSG with a multiple sleep latency test (MSLT) in some cases.

What is an MSLT?

The multiple sleep latency test (MSLT) measures daytime sleepiness and averages the time needed to fall asleep over five nap opportunities during the day. It is done immediately following an overnight PSG. While useful in diagnosing narcolepsy, the MSLT requires planning to minimize confounders, such as drug/medication effects, prior sleep deprivation, or mistiming of the test as in the case of circadian rhythm disorders. A prior sleep consult is strongly suggested.

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When should one order a PSG rather than a consult?

A diagnostic PSG can be ordered for suspected OSA in an otherwise normal child with low likelihood of other diagnoses (e.g., circadian disorders or central hypersomnia) or comorbidities (e.g., developmental delays or craniofacial abnormalities). PSG can also be used to follow up OSA six to eight weeks post-adenotonsillectomy.

When should a sleep consult be considered first?

- When a suspected sleep disorder is resistant or needs more time or attention than a simple clinic visit allows.
- When a child with developmental delays or special needs requires a sleep study or when extreme anxiety even to a simple PSG for OSA is predicted. Consults offer an opportunity to plan the study around the child's needs and predicted behaviors. (If you feel that touring the facility would be beneficial for a referred patient, specifically ask for an appointment at our Fairhill Sleep Center rather than our outreach clinics.)
- When CPAP/Bi-level PAP are required. Children more than adults need careful mask-fitting, habituation and education. This is best done after a sleep consult.
- When hypersomnia is a significant complaint. A consult will help assess the need for a next-day MSLT, actigraphy study, or analysis of sleep logs for confounders.
- When RLS is suspected. A consult can evaluate secondary causes and comorbid periodic limb movement disorder (PLMD).
- When parasomnias are severe, frequent or dangerous, or when nocturnal motor activity is suspicious for seizures. An expanded sleep study with full EEG or extra-limb leads may be needed.

Referrals

CALL 216.636.5860 TO SCHEDULE A SLEEP CONSULT WITH DR. JYOTI KRISHNA OR DR. SALLY IBRAHIM OR TO ARRANGE A SLEEP STUDY:

Sleep Consults

- Fairhill Pediatric Sleep Center
- Cleveland Clinic Main Campus
- Independence Family Health Center
- Richard E. Jacobs Health Center in Avon

Sleep Studies

FOR CHILDREN UNDER AGE 12 OR WITH SPECIAL NEEDS:

Sleep studies or special tests such as MSLT and EEG are performed at the Fairhill Sleep Center.

FOR OTHERWISE HEALTHY CHILDREN OVER AGE 12:

Routine polysomnograms are performed at any of our hotel-based labs across Greater Cleveland. Visit clevelandclinic.org/sleeplocations.



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