Treatment of Sleep Disturbances in the Context of ASD and ID

Children and adolescents with ASD and ID experience significant sleep disturbances that can lead to sleep deprivation for both the child and family. Underlying medical issues need to be identified.

Level 0 - Comprehensive Assessment:

See *Principles of Practice*. In addition, give special consideration to the following:

- Screening is best done by asking a short series of questions targeting insomnia using a screening tool (See Box 1 on page 7) and asking if the parent considers these a problem.
- Primary sleep disorders [Obstructive Sleep Apnea (OSA), Restless Leg Syndrome (RLS), Circadian Rhythm Disorders, and Narcolepsy]
- Medical [Gastroesophageal Reflux Disease (GERD), sleep apnea, night terrors, seizures, pain, low serum ferritin]; psychiatric (anxiety); and neurodevelopmental comorbidities.
- Consider comorbid chronic sleep loss and primary sleep disorders as potential contributors to psychiatric symptoms.
- Concomitant medications, especially psychotropic medications (e.g., stimulants, SSRIs)
- Assessment of proper sleep hygiene/sleep practices:
  - Poor sleep habits are a factor to consider when parents/children report inadequate sleep (e.g., bedtimes and wake up times that lack regular routine).
  - Electronics use, caffeine intake, napping
- Caregiver role
- Presentation: sleep onset versus sleep maintenance

Treatment of Sleep Disturbances in the Context of ASD and ID *(continued)*

Level 1 - Psychosocial/non-pharmacological intervention and treatment of comorbidities:

Education: Sleep toolkits are available for parents through Autism Speaks Autism Treatment Network (ATN). Visit ***floridamedicaidmentalhealth.org*** for updated links to sleep toolkits.

- Although the evidence base for effectiveness of behavioral interventions in children who have ASD & ID is limited, develop a sleep plan using specific behavioral interventions with the parents or caregivers to help address the identified sleep problems.
- Behavioral strategies:
  - Graduated extinction (e.g., withdrawal of reinforcement for inappropriate bedtime behaviors) and positive reinforcement of adaptive sleep behavior
  - Sleep training, bedtime fading, bedtime pass, and nightlight
  - Stimulus control, sleep restriction
- Caregiver-based interventions for younger children
- Healthy sleep practices for all
- Regular sleep schedule, avoid nighttime screens, limit caffeine, age appropriate napping
- Treat psychiatric comorbidities with appropriate psychotropic medications.
  - See relevant sections in the *2018-2019 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents* for dosing recommendations.
  - There should be agreement with the parents or caregivers about how symptoms and any emergent side effects of treatment will be measured, as well as the monitoring arrangements and expected duration of any trial of medication.

Level 2 - Melatonin.

- No data on children under 2 years old
- Dose: Starting dose 0.5 mg to 1 mg, titrate to 3 mg in children, and up to 10 mg in adolescents.
- Administer up to 2 hours prior to bedtime.
- Recommend the use of pharmaceutical grade melatonin
- Differences in response may occur due to lack of uniformity in manufacture of over-the-counter (OTC) brands.
- Better response if combined with behavioral interventions
- Most helpful for sleep onset; may not help for sleep maintenance

Treatment of Sleep Disturbances in the Context of ASD and ID *(continued)*

Level 3 - Clonidine.

- Pharmacotherapy should only be considered for short-term use if:
  - Insomnia results in significant impairments in child and/or caregiver daytime functioning.
  - Behavioral interventions alone are ineffective or if caregivers are unable to implement behavioral interventions.
- Pharmacotherapy with behavioral treatment may be appropriate for:
  - Short-term crisis intervention
  - Insomnia with comorbid high risk psychiatric (ADHD, MDD) or neurodevelopmental conditions (ASD)
  - Insomnia that exacerbates psychiatric and medical conditions
- Clonidine dose - 0.05 mg - 0.3 mg at bedtime:
  - Begin 0.05 mg to 0.1 mg at bedtime (0.1 mg tablet, ½ tablet to 1 tablet at bedtime).
  - If no significant improvement in sleep after one week, begin increasing by 0.05 mg to 0.1 mg each week (0.1 mg tablet, ½ tablet to 1 tablet each week) until there has been a satisfactory improvement in the sleep disturbance, treatment limiting side effects have emerged, or a total daily maximum dose of 0.3 mg at bedtime is reached.
  - Most helpful for sleep onset; may not help for sleep maintenance.
  - May develop tolerance and nocturnal awakening.
  - Monitor blood pressure and pulse.
  - Avoid abrupt discontinuation.

Level 4 - Consult specialist.

Consult with a specialist (pediatric sleep specialist, child and adolescent psychiatrist, pediatric neurologist, or developmental pediatrician).

Note: Antipsychotic medications, such as quetiapine (Seroquel®) should not be used for management of insomnia.

Not recommended:

- Medication as the first or sole treatment strategy.
- Use of sedating psychotherapeutic medication in the absence of other psychiatric disorder

The following have little or no scientific evidence, insufficient clinical pediatric use or experience and/or unacceptable risk/benefit ratios to warrant clinical recommendations:

- Amitriptyline, Benzodiazepines, Chloral Hydrate, Doxepin, Doxylamine, Eszopiclone, First/second generation antipsychotics (FGAs/SGAs), Ramelteon, Suvorexant, Zolpidem