#### **Pediatrics TeleECHO**

Medical Co-morbidities in Children with ASD: Sleep Issues,
Gastrointestinal Issues, Epilepsy, and Safety



Kendra Lystad MD
Assistant Professor of Pediatrics
University of Utah

### Medical Co-morbidities

 Impacts the child's quality of life and functioning as well as the functioning of the entire family

- Will discuss
  - Anticipatory guidance
  - Management strategies for primary care providers









- Common in children with ASD (50-80%)
- Young children
  - Bedtime resistance
  - Parasomnias
  - Night waking
- Adolescents
  - Delayed sleep onset
  - Shorter sleep duration
  - Daytime sleepiness











#### Causes

- Most common: learned behavior
- Obstructive sleep apnea
- Restless leg syndrome
- Psychiatric diagnoses anxiety, ADHD, mood disturbance
- Medical diagnoses GERD, seizures, asthma, eczema, enuresis
- Screen time











#### Treatment

- Sleep hygiene routine, clear expectations, screen time avoidance
  - Difficult. But, successful when CONSISTENTLY implemented
- If concern for OSA
  - Sleep medicine referral/sleep study
- If concern for restless leg syndrome
  - Labs for iron deficiency and treat if necessary









#### Treatment

- Medications
  - Melatonin
    - Sleep onset
    - 1-3 mg 1-2 hours before bedtime
    - Side effects: nightmares
  - Clonidine
    - Sleep onset and maintenance
    - 0.025-0.2mg
    - Side effects: hypotension





- Mirtazapıne
  - Sleep onset and maintenance
  - 3.75-15mg
  - Side effects: increased appetite/weight gain
- Trazodone
  - Sleep onset and maintenance
  - 25-200mg
  - Side effects: priapism









### Gastrointestinal Issues



- Increased risk of:
  - Constipation
  - Diarrhea
  - Abdominal pain
  - Feeding problems
- May be less likely to report symptoms (language delay, sensory perception)
  - Consider GI issues when patients are agitated, changes in appetite, sleep disturbance, or other behavioral issues



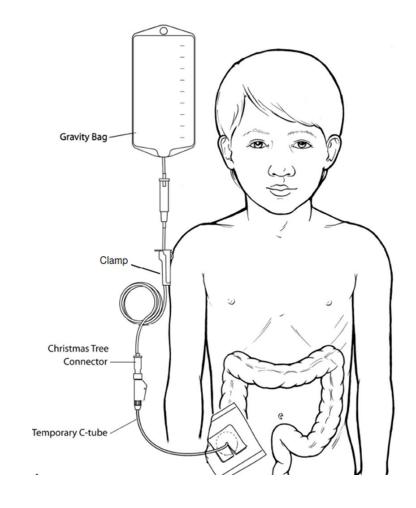






### Gastrointestinal Issues

- Always consider constipation
  - Treat as you normally would
    - Miralax
    - Senna
    - Lactulose
  - May need to consider referral to colorectal surgery
    - Cecostomy/appendicostomy if needed











## Overweight and Obesity/Feeding Issues

- Covered in detail by Sydney Abbott, Registered Dietician
- Up to 75% of children with ASD have feeding issues
  - Food selectivity
  - Compulsive eating
  - Rituals around food
  - Pica
  - Rumination
  - Delayed oral motor skills
  - Food refusal







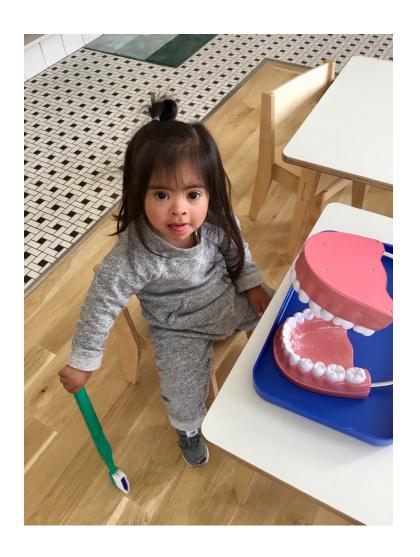


### Dental Care

Unmet dental needs

Try behavioral intervention first

- May need sedation
  - If sedated consider labs and vaccines











# Seizures/Epilepsy

Increased risk of seizures in children with ASD (7-23%)
 AND

Increased risk for ASD in children with epilepsy (6.3%)

- Among children with ASD, factors that increase seizure likelihood:
  - Intellectual disability
  - Female gender
  - Lower gestational age









## Seizures/Epilepsy

- Children with ASD and seizures have higher rates of maladaptive behaviors
  - Independent of cognitive abilities
- Routine EEG is not recommended
- If symptomatic or atypical regression overnight EEG

- If seizures/epilepsy treat/refer as you normally would
  - However, may be increased treatment resistance









## Safety



#### Wandering

- Common: 50% of children 4 to 10 were reported as having wandered
- Reasons: Enjoyable, wanting to get somewhere desirable, wanting to escape an activity, intense interest (water)
- Increased risk with co-occurring intellectual disability and more severe ASD
  - Less likely to be able to give parent/caregiver information
- Prevention is key (resources listed at the end)
- Recommend swimming lessons!









### Resources

- Autism Treatment Network has many Autism related guidelines for providers. They are all here: <a href="mailto:tps://www.autismspeaks.org/science-news/autism-related-guidelines-healthcare-providers">tps://www.autismspeaks.org/science-news/autism-related-guidelines-healthcare-providers</a>
  - ATN practice pathway for insomnia
  - ATN practice pathway on constipation
- Wandering resources:
  - National Autism Association Big Red Safety Toolkit
     http://nationalautismassociation.org/docs/BigRedSafetyToolkit.pdf
  - Autism Speaks Safety Products <a href="http://www.autismspeaks.org/family-services/resource-library/safety-products">http://www.autismspeaks.org/family-services/resource-library/safety-products</a>
  - Identification Bracelets or Anklets <a href="http://www.medicalert.org/">http://www.medicalert.org/</a>
  - National Autism Association Safety Resources









### Questions?

Thank you!







