KITSAP COUNTY CHILD HEALTH NOTES

Promoting early identification and partnerships between families, primary health care providers & the community

Distributed by: Kitsap County Medical Home Leadership Network in conjunction with Holly Ridge, Kitsap Public Health District, PCAP (Parent Child Assistance Program) & the Kitsap County Parent Coalition

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Health Management of Children with Autism Spectrum Disorder: Co-Occurring Gastrointestinal Problems and Sleep Disorders

Primary care providers have an important role in the management of health problems associated with autism spectrum disorder (ASD). GI and sleep issues are two of the most common health concerns reported by parents of children with ASD, and they often co-occur together. Children with ASD are 3 times more likely to suffer one or more chronic gastrointestinal (GI) problems and over 50% have one or more chronic sleep disturbances. It is recommended that GI and sleep problems be included in the review of systems at each primary care appointment.

Gastrointestinal Problems and ASD



Problem: Gastrointestinal (GI) disorders rank among the most common medical conditions associated with autism. The relationship between GI problems and ASD is not fully clear at this time, however, recent research found higher levels of *Clostridia* in children with ASD compared to children without ASD. There is a higher incidence of GI issues in children with ASD compared to other children. They also appear to be associated with increased psychiatric comorbidity and greater intensity of behavioral symptoms among children with ASD. Many children with ASD (including those who are verbal) cannot clearly communicate their symptoms or discomfort and may express their distress in exaggerated behaviors and irritability. This causes stress for the entire family.

Common Presenting Concerns: Chronic constipation is the most commonly reported GI concern, followed by chronic diarrhea, painful stooling, gastroesophageal reflux, vomiting, bloating, and abdominal pain.

Management Considerations:

- Evaluate as any other child with a targeted history, physical examination, and further work-up as needed.
- Elicit toilet training history and dietary intake to detect toilet training resistance or feeding problems. (These issues may trigger GI problems *and/or* be exacerbated by them.)
- Chronic constipation may require aggressive treatment including home-based "clean-outs."
- Signs that a non- or minimally verbal child may have GI discomfort are bruxism, back arching, and pressing on the abdomen. There may also be an increase of self-soothing repetitive behaviors or more aggressive or challenging behaviors.

Consider Referral:

- To a pediatric gastroenterologist for consultation or evaluation for unresponsive chronic GI symptoms.
- To a pediatric nutritionist and/or feeding therapist for consultation regarding the child's diet, nutrition, and eating behavior.
- To a Board Certified Behavior Analyst (<u>BCBA</u>), for <u>ABA therapy</u> to address behavioral components, once medical management has been initiated.

Practice Pearls:

- Some families choose a gluten- and casein-free (or "GF/CF") diet as a complementary or alternative autism treatment for their child. Current research studies have found little evidence supporting this treatment as efficacious for reducing the symptoms of ASD. Testing can be helpful to clarify whether a true food intolerance is present.
- Some psychotropic medications are associated with GI side effects and/or weight gain.

Sleep Problems and ASD



Problem: Sleep disorders are prevalent among children with ASD and are associated with poorer behavioral and functional outcomes in this population. Recent research suggests that there is a biological component to the sleep difficulties including gene mutations in genes that regulate circadian rhythms, possible decreased REM sleep cycle duration compared to peers without ASD, and possible lower levels of melatonin production compared to peers without

ASD. Secondary consequences of poor child sleep include parental exhaustion, disruption of family life, and reduced daytime functional and behavioral performance of all family members.

Common Presenting Concerns: Difficulty with sleep onset and/or maintenance are frequently reported. Other concerns include irregular sleep-wake patterns, early morning awakenings, and poor sleep routines.

Management Considerations:

- Inquire about the adequacy of sleep for all family members at each primary health care appointment.
- Take a complete history of bedtime routine, sleep latency, nighttime awakenings, and caregiver responses. Consider asking family to keep a 1- to 2-week sleep diary.
- Rule out medical contributors to poor sleep, including obstructive sleep apnea, gastroesophageal reflux, and medication side effects.
- Behavioral interventions should always be considered for addressing child sleep disturbances. Discuss good sleep hygiene practices: consistent bedtime, soothing and predictable bedtime routines, bedroom conducive to sleep, avoiding screen time prior to bed, and bed not used for non-sleep activity such as play or time-out. Help the family establish strategies for responding to child's bedtime and nighttime waking behavior and monitor implementation.
- Medication for sleep may also need to be considered.

Consider Referral:

- To appropriate pediatric specialists for consultation or evaluation if medical contributions are suspected.
- To a developmental pediatrician, developmental pediatric advanced practice provider, pediatric psychologist or board certified behavioral analyst (<u>BCBA</u>) experienced in working with children with ASD and implementation of practical behavioral strategies.

Practice Pearl:

 Consider screening for other conditions that commonly co-occur with ASD and may play a role in sleep problems: seizures, atopic conditions, anxiety, inattention/impulsivity, and sensory processing difficulties.

References

Autism Speaks. (2017). <u>Autism and Health: A Special Report</u> By Autism Speaks, Advances in Understanding and Treating the Health Conditions that Frequently Accompany Autism.

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McElhanon, B. O., McCracken, C., Karpen, S., & Sharp, W. G. (2014). <u>Gastrointestinal Symptoms in Autism Spectrum Disorder: A Meta-analysis</u>. Pediatrics, 133(5), 872-883. doi:10.1542/pedS.2013-3995

Moore, M., Evans, V., Hanvey, G., & Johnson, C. (2017). <u>Assessment of Sleep in Children with Autism Spectrum Disorder. Children</u>, 4(8), 72. doi:10.3390/children4080072

Nikolov, R., Bearss, K., Lettinga, J., Erickson, C., Rodowski, M., Aman, M., & Scahill, L. (2009). Gastrointestinal symptoms in a sample of children with pervasive developmental disorders. Journal of Autism & Developmental Disorders, 39(3), 405-413. doi:10.1007/s10803-008-0637-8

ASD RESOURCES

National

- ◆ AAP Autism Management Guidelineshttp://pediatrics.aappublications.org/content/120/5/1162.full
- ♦ Autism Society of America.....<u>www.autism-society.org</u>
- ♦ Autism Speaks.....<u>www.autismspeaks.org</u>
- ♦ National Autism Association.......http://nationalautismassociation.org/biq-red-safety-box/

Regional

- ♦ WA State Nutrition Network for CSHCN http://depts.washington.edu/cshcnnut/
- ♦ Families for Effective Autism Treatment (FEAT) of Washington.....<u>www.featwa.org</u>

Online Trainings

- ◆ Great MINDS Online Standard Autism Screening Training.......http://www.cardeaservices.org/resourcecenter/great-minds-asd-standardized-autism-screening-training
 - Available online for AMA provided CE credit until August 30, 2019

KITSAP COUNTY SPECIAL NEEDS INFORMATION AND RESOURCES

- ➤ Birth to 3 years
 - o Holly Ridge Center Infant Toddler Program
 - Lead Family Resource Coordinator (Jamie Ream Cistulli)

360-373-2536

- ➤ Birth to 18 years:
 - Kitsap Public Health District
 - Children with Special Health Care Needs Coordinator (Karina Mazur)

360-723-2235

- ➤ 3-21 years:
 - o Local School Districts Child Find

Bainbridge Island	206-780-3034	Bremerton	360-473-1008
Central Kitsap	360-662-1040	North Kitsap	360-394-2604
North Mason	360-277-2111	South Kitsan	360-443-3630

- Family to Family Support:
 - o Kitsap County Parent Coalition
 - Coordinator (<u>Melissa Lund</u>)

360-373-2502 x 100

- Arc of the Peninsulas
 - Parent to Parent Coordinator (Amanda Smith)

360-377-3473 x 104

- > Terminology:
 - ABA (Applied Behavior Analysis) Therapy
 - Goal: To increase appropriate behavior and decrease innapropriate behavior.
 - Coverage: This a Medicaid/Apple Health covered service for qualifying children ages 2-20.
 - Eligibility: In order for a child or youth to be eligible for ABA therapy through Apple Health/Medicaid, a recognized Center of Excellence (COE) must conduct a comprehensive evaluation, and write an order for Applied Behavior Analysis therapy.
 - Training to become a COE, is available for <u>certain providers</u> periodically through the Washington Health Care Authority, in partnership with Seattle Children's Hospital.
 - The HCA maintains a list of <u>statewide providers</u> that accept Medicaid. If you are a service provider and interested in additional information about ABA providers (ex: providers that accept other insurance), that have served families in the Kitsap area, please contact <u>Karina Mazur</u>, CSHCN Coordinator at Kitsap Public Health.