

# Oral Health Fact Sheet for Medical Professionals

## Children with Autism Spectrum Disorder

*Autistic disorder is the abnormal or impaired development in social interaction and communication coupled with a restricted repertoire of activity and interest. Manifestations of the disorder vary depending on the developmental level and chronological age of the individual. (ICD 9 Code 299.0)*

### Oral Manifestations and Considerations

#### Oral

- Bruxism (20-25%)
- Non-nutritive chewing
- Tongue thrusting
- Self-injury (picking at gingiva, biting lips) creating ulcerations. Erosion (many parents report regurgitation)
- Caries-similar to general population, however some children receive sweet foods as behavioral rewards
- Poor oral hygiene-Home care measures are exceedingly difficult for many children/parents
- Many patients have very limited dietary preferences (exclusively pureed foods, no fruits/vegetables, etc.)

#### Other Potential Disorders/Concerns

- 70% with cognitive impairment; 40% of whom are “severe”
- Epilepsy over 30% have experienced seizures by adolescence
- Depression/Anxiety
- Attention Deficit Hyperactivity Disorder (ADHD)
- Obsessive Compulsive Disorder (OCD)
- Schizophrenia

### Oral Side Effects of Commonly Prescribed Medications

SYMPTOM	MEDICATION	SIDE EFFECTS
Hyperactivity	A. <i>CNS Stimulants</i> (Methylphenidate) B. <i>Antihypertensive</i> (Clonidine)	A. Xerostomia B. Xerostomia, dysphagia, sialadenitis. May cause orthostatic hypotension and potentiate CNS depression of other CNS depressants used in dentistry
Repetitive Behaviors	<i>Antidepressants</i> (Fluoxetine and Sertraline)	Xerostomia, dysphagia, sialadenitis, dysgeusia, stomatitis, gingivitis, glossitis, discolored tongue, bruxism
Aggressive Behaviors	A. <i>Anticonvulsants</i> (Carbamazepine and Valproate)  B. <i>Antipsychotics</i> (Olanzapine and Risperidone)	A. Xerostomia, stomatitis, glossitis, dysgeusia. Excessive bleeding may result when either medication is combined with aspirin or non-steroidal anti-inflammatory drugs B. Xerostomia, sialorrhea, dysphagia, dysgeusia, stomatitis, gingivitis, tongue edema, glossitis, discolored tongue

***Xerostomia is highly conducive to dental caries.***

# Children with Autism Spectrum Disorder continued

## Parent/Caregiver Support and Guidance

- Discourage consumption of cariogenic (cavity causing) foods and beverages.
- Prescribe sugar-free medications if available.
- Recommend preventive measures such as topical fluoride and sealants.
- Advise brushing teeth with fluoridated toothpaste twice daily. Have parents be cautious with power toothbrushes which can be too stimulating for some children.
- Instruct caregiver on appropriate protocol following dental trauma (seek immediate professional care and locate/preserve missing tooth if avulsed).
- Recommend rinsing with water thoroughly after taking each dose of sugar containing medication and suggest frequent water intake for children taking xerostomic medications.
- Discuss safety issues appropriate to the age of the child, such as car seats, stair gates, bike helmets, and mouth guards to prevent oral-facial trauma.
- Discuss habits that may harm the child's teeth such as propping baby bottles, putting child to bed with bottle.
- Refer to dentist any oral developmental abnormalities.

Further information (Medical Guidance for oral health, Dental Guidance for oral health, Oral Health Guidance for Parents/Caregivers and Dental Professional Fact Sheet for Autism) can be found at:

[http://dental.washington.edu/departments/omed/decod/special\\_needs\\_facts.php](http://dental.washington.edu/departments/omed/decod/special_needs_facts.php)

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## References

- Friedlander, A., Yagiela, J., Paterno, V., Mahler, M. (2006) The neuropathology, medical management and dental implications of autism. *J Am Dent Assoc*, 137(11): 1517-1527.
- Loo, C., Graham, R., Hughes, C. (2008) The caries experience and behavior of dental patients with autism spectrum disorder. *J Am Dent Assoc*, 139: 1518-1524.
- Ming, X., Brimacombe, M., Chaaban, J., Zimmerman-Bier, B., Wagner, G. C. (2008). Autism Spectrum Disorders: Concurrent Clinical Disorders. *Journal of Child Neurology*. 23: 6-13.

## Additional Resources

- [NIH institute for Autism Spectrum Disorders](#)
- [Special Care: an Oral Health Professionals Guide to Serving Young Children with Special Health Care Needs](#)
- [Bright Futures Oral Health Pocket Guide](#)
- [American Academy of Pediatrics Oral Health Initiative](#)
- [American Academy of Pediatric Dentistry: 2008-09 Definitions, Oral Health Policies and Clinical Guidelines](#)
- [MCH Resource Center](#)
- [ASTDD-Special Needs](#)
- [Block Oral Disease, MA](#)
- [NOHIC-NIDCR publications](#)