

Neurocognitive Outcome and its Relationship to Educational Needs



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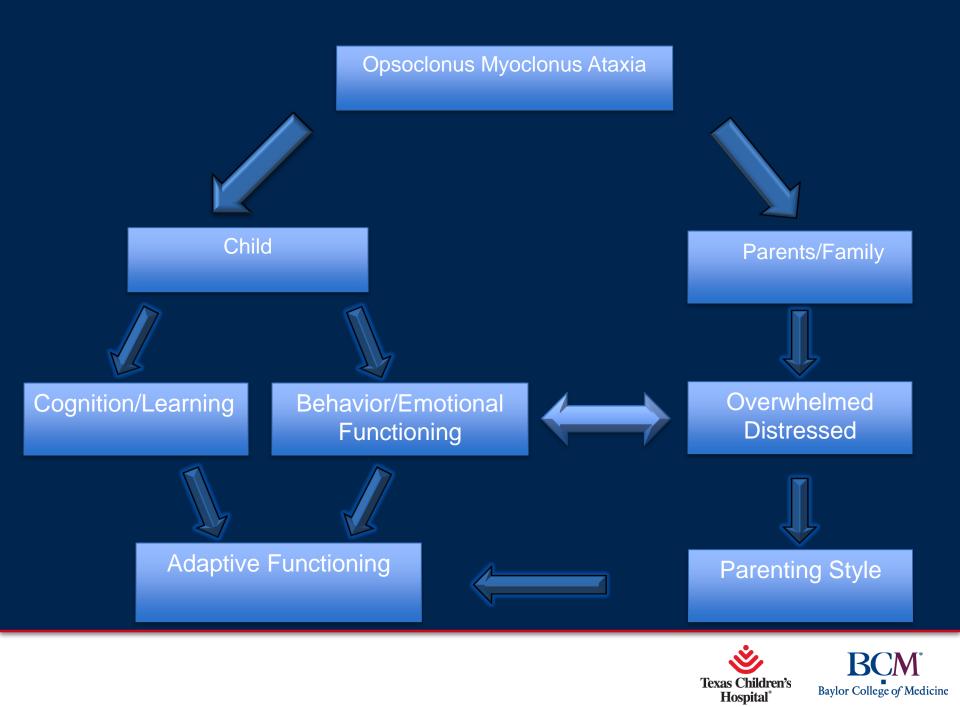


•What is a neuropsychological evaluation and....does my does my child really need one?

•What does the literature tell us about cognitive and behavioral outcome?

•How might any cognitive and behavioral changes impact my child's learning and educational needs?





Referral Questions

•What is the child's baseline level of development?

- Is the child's development regressing, plateauing, or progressing?
- •Are there any cognitive consequences of the opsoclonus myoclonus ataxia syndrome?
- •How are the child's cognitive strengths and weaknesses likely to affect academic performance?



Components of a Neuropsychological Evaluation

- History
- Quantitative Data
 - -Child's performance on standardized tests
 - -Parent rating scales
 - -Teacher rating scales
- Qualitative Information



Cognitive Skills Assessed

Intelligence
Language
Visual-Spatial Ability
Fine Motor/Visual-Motor Skills
Memory
Attention
Executive Functioning







Other Areas Assessed

Academic Development
Behavior
Emotional Functioning
Adaptive Functioning











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Neurocognitive Outcome: Literature to Date

Characterize developmental outcome

- -Cognitive
- -Academic
- -Behavioral/Emotional
- -Adaptive Functioning

Identify OMA-related factors that predict outcome



Neurocognitive Outcome: Literature to Date

- •Literature is currently limited
- •Developmental outcome highly variable
- •Variability maybe related to chronic relapses



Neurocognitive Outcome: Literature to Date

•Speech and Language

- -Articulation
- -Grammar and sentence structure
- •Fine Motor/Visual Motor

Behavior/Emotional Functioning

- -Inattention
- -Difficulty regulating emotions and behavior
- -Anxiety and obsessive compulsive tendencies

Adaptive Functioning

Brunklaus et. al. Pediatrics (2011). Outcome and Prognostic Features in OMS from Infancy to Aver Life Mitchell, et al Pediatrics (2005). Longitudinal Neurodevelopmental Evaluation of Children with Over Hospital Hospital





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Intervention: Birth to 5

Early Childhood Intervention

- Birth to 36 months
- Dept. of Assistive and Rehabilitative Services

•Preschool Program for Children with Disabilities

- 3 to 5 years
- School District

•Private

TherapiesOT, PT, Speech Therapy

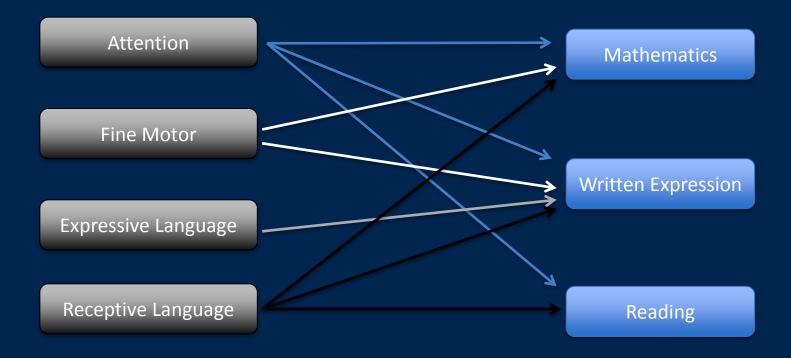
- School





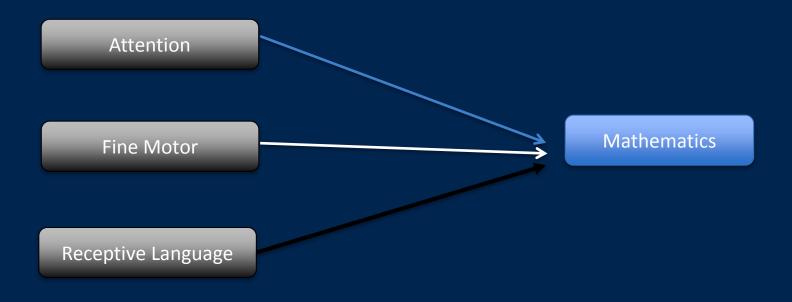


Relationship of Cognitive Weaknesses to Academic Development





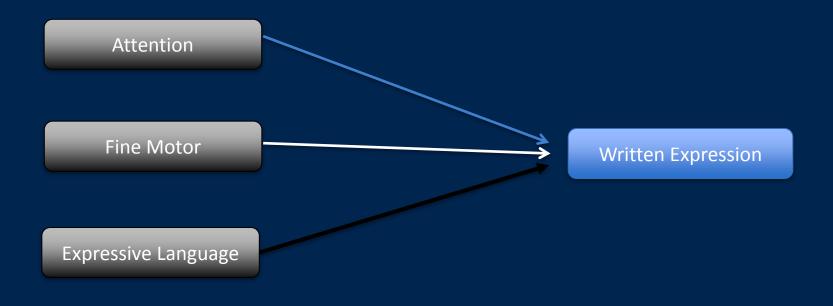
Relationship of Cognitive Weaknesses to Math







Relationship of Cognitive Weaknesses to Written Expression





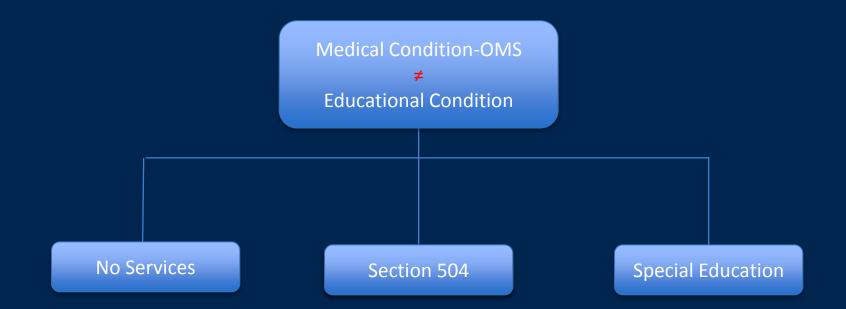
Relationship of Cognitive Weaknesses to Reading







Accessing Educational Support





Educational Conditions:

- •Other Health Impaired (OHI)
- Speech Impairment
- •Specific Learning Disability
- Intellectual Disability
- Orthopedic Impairment
- Auditory Impairment
- Visual Impairment
- Traumatic Brain Injury
- Autism
- Emotional Disturbance
- Multiple Disabilities



Section 504 of the Rehabilitation Act

•Eligibility:

- -Physical or mental impairment
- -Substantially limits a major life activity (speaking, learning)

Accommodations:

- Provide students with disabilities equal opportunity to participate in regular education
- -Do not lower for alter academics standards

•May receive related services (OT, Speech, PT)



Special Education – IDEA 2005

•Must have a condition plus an educational need

Specifically Designed Instruction - IEP

-Adapts content or delivery of instruction to meet the educational need arising from disability

Modifications

-Changes that affect expectations and standards



Special Education Services

Continuum of Services

- -General Education
 - Accommodations
 - •Modified content individualized goals and objectives
 - Modified standards STAAR-M
- In-Class Support
- -Content Mastery
- -Resource Class
- -Self-Contained Class

Therapies

-Speech Therapy, Occupational Therapy, Physical Therapy

Assistive Technology



Websites

DARS ECI Website <u>www.dars.state.tx.us/ecis</u>

Texas Education Agency – Special Education Page http://ritter.tea.state.tx.us/special.ed/

IDEA Manual www.disabilityrightstx.org





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Thank You OMS Life