



Pediatric Clips



Recognizing Attention Deficient Hyperactivity Disorder in Children *Mary Ann Rosencrans, MSN, CPNP*

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CASE STUDY:

Jacob is a 10 year old in the fifth grade. He has always been a straight A student. His grades have been steadily dropping and he has been complaining of headaches and stomach aches on school days to stay home. He has been very touchy lately.

J.T. is a 9 year old boy in the third grade. The school is concerned about him frequently soiling his pants. Mom thinks he is just "too lazy" to go to the bathroom. His last checkup was when he was 5 years old. Mom seems distracted and unconcerned and is only in your office because the school has concerns about his bowel habits.

Julia is a 7 year old girl in the first grade. She was held back in kindergarten because she seemed to lack the maturity to move ahead. Her mother is struggling trying to manage her constant defiance, endless energy and poor sleeping habits. Julia has not responded to any of mom's attempts at discipline.

CASE DISCUSSION

Attention deficit hyperactivity disorder (ADHD) is currently defined as a chronic neurobehavioral disorder characterized by core symptoms of inattention, hyperactivity and impulsivity. The current DMS IV recommends symptoms of ADHD be present before 7 years of age.¹ The new version of the DMS (DMS V) available in 2012 plans to recommend that symptoms be present before the age of 12 years.

CHARACTERISTICS

ADHD describes a collection of biologically based, inborn characteristics that can interfere with every aspects of daily functioning. The disorder may show up at any time when a child's attentional abilities are not adequate to meet expectations. Left unrecognized, ADHD can put the child at greater risk for a variety of serious dysfunctional behaviors. ADHD and attention deficit disorder (ADD) have been compared to an iceberg with only the tip showing and the rest hidden.²

THE TIP OF THE ICEBERG: *the obvious ADD/ADHD behavior*

Hyperactivity. Restless, talks a lot, fidgets, can't sit still, runs or climbs a lot, always on the go

Impulsivity. Lacks self control, difficulty waiting his or her turn, blurts out, interrupts, tells untruths, talks a lot, loses temper

Inattention. Disorganized, doesn't follow through, doesn't pay attention/listen, forgetful, distractible, makes careless mistakes, loses things, doesn't do school work

HIDDEN BENEATH THE SURFACE: *The not so obvious ADD/ADHD behaviors*

Neurotransmitter deficits. Inefficient levels of neurotransmitters, norepinephrine, dopamine, and serotonin: working memory and recall, alertness, and effect, internalizing language, controlling emotions, complex problem solving

Learning problems (90%) and specific learning disabilities(25-30%). Poor working memory, can't memorize easily, forgets teacher and parent request, slow math calculation, slow retrieval of information, poor

written expression, difficulty writing essays, poor listening and reading comprehension, difficulty describing the world in words, difficulty putting words together rapidly, disorganization, slow cognitive processing, poor handwriting, poor fine motor coordination, inattention, impulsive learning style

Coexisting conditions. Two-thirds have at least one other condition: anxiety (37%), depression (28%), bipolar ((12%), substance abuse (5%), tourette disorder (11%), OCD, oppositional defiant disorder (59%), conduct disorder (43%)

Sleep disturbance (50%). Doesn't get restful sleep, can't fall asleep, can't wake up, late for school, sleeps in class, sleep deprived, irritable, morning battles with parents

Impaired sense of time. Doesn't judge the passage of time accurately, loses track of time, often late, doesn't have the skills to plan ahead, forgets long-term projects or is late, difficulty estimating time required for task, difficulty planning for the future,

Continued

Continued from the front.

impatient, hates waiting, time creeps, homework takes forever, avoids doing homework

Two- to four-year developmental delay. Less mature, less responsible, acts younger than chronological age

Doesn't learn easily from rewards and punishment. Repeats misbehavior, difficult to discipline, less likely to follow rules or doesn't follow rules, difficulty managing own behavior, doesn't learn from past behavior, long-term rewards don't work, needs immediate rewards and gratification, doesn't examine own behavior, difficulty changing behavior

Low frustration tolerance. Short fuse, emotionally reactive, loses temper easily, gives up too easily, doesn't stick with things, speaks or acts before thinking, overly concerned with own feelings, difficulty seeing others prospective, self-centered, selfish

ASSESSMENT

The American Academy of Pediatrics and The American Academy of Child and Adolescent Psychiatry also have practice parameters that describe important components of an ADHD evaluation.^{3,4}

DIFFERENTIAL DIAGNOSIS/COMORBIDITIES

There is great heterogeneity in ADHD, as the case studies present. Jacob's outcome is bright with the recognition that he was overwhelmed by the increasing demand for organizational skills. The consequences of JT's procrastination using the bathroom will require intensive treatment. His potential to manage his problems is concerning considering his mother's lack of insight. Julia has started showing progress since her family has implemented a multifaceted and interdisciplinary approach to address her behaviors.

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3. American Academy of Pediatrics. (2000). Clinical practice guideline: Diagnosis and evaluation of the child with attention deficit/hyperactivity disorder.
4. Pliszka, S. and the AACAP Work Group on Quality Issues. (2007). Practice parameter for the assessment of children and adolescents with attention deficit/hyperactivity disorder. Journal of American Academy of Child and Adolescent Psychiatry, 46(7),894-921.

FEATURED NURSE SPECIALIST

Mary Ann Rosencrans, MSN, CNP,

is a pediatric nurse practitioner at Ohio Pediatrics, Inc. She received her bachelor's degree from Wright State University and her master's from Indiana University. Over the years Mary Ann has developed expertise managing children with complex needs including developmental, behavioral and mental health conditions. She

has a background that includes academia, child advocacy in the legislative arena, nursing regulation, research and an active role in several professional organizations.

Developmental pediatrics at Dayton Children's

The department of developmental pediatrics offers a variety of diagnostic and treatment services

for children with developmental problems. Children are treated for developmental delays including language, cognitive, motor or social. The department also treats children with Down syndrome, hypotonia/hypertonia, cerebral palsy, ADHD/LD and autism. To contact the developmental pediatrics department, call 937-641-5487.



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