

# SCIENCE-BASED TREATMENT OF CHILD & ADOLESCENT ONSET DISRUPTIVE BEHAVIOR DISORDERS

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# CHILD AND ADOLESCENT DISRUPTIVE BEHAVIOR DISORDERS OVERVIEW

- × Introduction
- × Attention-Deficit/Hyperactivity Disorders
  - + Predominantly Inattentive Type
  - + Predominantly Hyperactive-Impulsive Type
  - + Combined Type
  - + Residual
- × Oppositional Defiant Disorder
- × Conduct Disorder
  - + Childhood-Onset Type
  - + Adolescent-Onset Type
- × Other

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ Genetically transmitted in 70-95% of cases
- ✘ Results from chemical imbalance or deficiency in certain neurotransmitters
- ✘ Rate at which brain utilizes glucose is depressed (Zametkin et al, 1990)
- ✘ Depressed release of dopamine might have a role (Volkow et al, 2003)

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ **Dopamine and Norepinephrine play role in attention and thinking**
  - + NE is critical to reasoning, learning, problem solving, priority setting and organizational thought
  - + NE functions in maintaining arousal, regulating excitability related to danger, contributes to memory storage and retrieval
  - + DA is involved in motor control and interacts with NE in the frontal lobes to maintain attention

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ Linked to several brain areas
  - + PREFRONTAL AND FRONTAL LOBES
    - ✘ CONTROL BEHAVIOR AND SYNTHESIZE THOUGHTS AND MOTOR ACTS INTO PURPOSEFUL SEQUENCES
  - + CONNECTIONS TO BASAL GANGLIA
  - + THEIR RELATIONSHIP WITH THE CEREBELLUM
- ✘ In severe cases the frontal lobes were 3-4% smaller
- ✘ Temporal gray matter, caudate nucleus and cerebellum were smaller

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ Substance-Related Disorders are familial
- ✘ 3-5% in school-age kids
- ✘ Another 15-20% of school-aged population show transient behaviors suggestive of ADHD
- ✘ Boys are 3 times more likely than girls to have ADHD
- ✘ Symptoms decrease with age but 50-65% of children still manifest symptoms into adulthood (Korn & Weiss, 2003)

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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## × IMPACT (Barkley, 2002)

- + 32-40% WILL DROP OUT OF SCHOOL
- + ONLY 5-10% WILL COMPLETE COLLEGE
- + 50-70% WILL HAVE FEW OR NO FRIENDS
- + 70-80% WILL UNDERPERFORM AT WORK
- + 40-50% WILL ENGAGE IN ANTISOCIAL ACTIVITIES
- + MORE LIKELY TO EXPERIENCE TEEN PREGNANCY & SEXUALLY TRANSMITTED DISEASES
- + HAVE MORE ACCIDENTS
- + EXPERIENCE DEPRESSION

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × CO-OCCURRING-CHILDREN & ADOLESCENTS

- + 54-84%-Oppositional Defiant Disorder
- + Substance Abuse problems
- + Conduct Disorder
- + Anxiety Disorders
- + Affective Disorders

Harvard Mental Health Letter, “Treating ADHD in Children and Adolescents”, Vol 25, No. 4, October, 2008.

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × CHARACTERISTICS

+ *INATTENTION-DISTRACTIBILITY*

+ *IMPULSIVITY*

+ *HYPERACTIVITY*

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## ✗ **INATTENTION-DISTRACTIBILITY**

- + *Doesn't seem to listen*
- + *Fails to finish assigned tasks*
- + *Often loses things*
- + *Difficulty concentrating*
- + *Easily distracted*
- + *Daydreams*
- + *Requires frequent redirection*
- + *Can be very quiet and withdrawn*

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × *IMPULSIVITY*

- × *Rushing into things*
- × *Careless errors*
- × *Risk taking*
- × *Taking dares*
- × *Accident/injury prone*
- × *Impatient*
- × *Interruptions*

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × *HYPERACTIVITY*

- × *Restless*
- × *Can't sit still*
- × *Talks excessively*
- × *Fidgeting*
- × *Always on the go*
- × *Easily over-stimulated*

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × CHANGING PRESENTATION

### + 3-6 YEAR OLDS

- × Motor restlessness
- × Insatiable curiosity
- × “Dangerously daring”
- × Vigorous, aggressive (breaks toys, accidents)
- × Demanding, argumentative
- × Noisy, interrupts
- × Low levels of compliance

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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## × CHANGING PRESENTATION

### + 6-12 YEAR OLDS

- × Easily distracted
- × Homework poorly organized, incomplete with careless errors
- × Performs below expectations
- × Blurts out answers before question is completed
- × Interrupts others
- × Difficulties in peer relationships
- × Fails to wait turn
- × “Immaturity”

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × CHANGING PRESENTATION

### + 12-18 YEAR OLDS

- × Sense of inner restlessness
- × Poor follow-through
- × Fails to work independently
- × “Risky” behaviors-sex, drugs, driving
- × Poor self-esteem
- × Poor peer relationships
- × Difficulty with authority figures

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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## × RULE OUT

+ Gifted child

× IQ Testing

+ Learning Disability

× Academic/Perceptual testing by psychologist

+ Neurological Condition (seizures, Tourettes, etc.)

× Pediatric Neurologist-EEG, 24 hr EEG, MRI, etc.

+ Behavioral and Emotional problems secondary to anxiety and depression

× Psycho-Social history & personality testing

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × RULE OUT

- + Early Life Developmental Trauma
- + Vision Acuity Problem
- + Hearing Problem including intermittent middle ear infections
- + Metabolic Problem
  - × Food allergies, signs of metabolic illness like Failure to Thrive, Thyroid, etc.

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × Preschool

- + Comprehensive Assessment
- + Followed by at least 8 weeks of behavioral intervention
- + Before consider the initiation of pharmacotherapy
  - × Short -acting methylphenidate

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × STIMULANTS-FDA APPROVED

### + Immediate Release

- × Methylphenidate (Ritalin and Methylin)
- × D-Methylphenidate (Focalin)
- × Mixed Amphetamine Salts (Adderall)
- × D-Amphetamine (Dexedrine)

### + Single pulse sustained release (swallow whole)

- × Methylphenidate (Ritalin SR, Metadate ER, Methylin ER)

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × STIMULANTS-FDA APPROVED

- × Beaded delivery system (30% immediate and 70% 3hrs later)- (Metadate CD)
  - × Can sprinkle beads into soft food
- × Beaded delivery system (50% immediate release and 50% released 4 hrs later)- (Ritalin LA, Focalin XR, Adderall XR, Dexedrine Spansule)
- × Osmotic-release system (OROS)- (18% immediate and 82% gradually released, replicates tid dosing)
  - × Methylphenidate- Concerta
- × Patches
  - × Methylphenidate (Daytrana)-worn up to 9 hours per day (skin rash)
  - × Lisdexamfetamine (Vyvanse-Adderall patch)

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × NON-STIMULANT-FDA APPROVED

### + Immediate-release

#### × Atomoxetine (Strattera)

- ★ Potential severe liver damage ([www.fda.gov](http://www.fda.gov))
- ★ Possible suicidal thoughts

### + Extended-release

#### × Guanfacine ER (Intuniv)

- ★ Binds selectively to alpha 2A-adrenoreceptors in prefrontal cortex
  - × Linked to attention and executive function

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × NON-STIMULANT-NOT FDA APPROVED

### + Immediate Release

- × Guanfacine IR (Tenex)
- × Clonidine (Catapres)
- × Bupropriion (Wellbutrin/Zyban)
- × Imipramine (Tofranil)
- × Nortryptiline (Aventil/ Pamelor)
- × Modafinil (Provigil)
  - \* Not FDA approved FOR CHILDREN OR ADOLESCENTS-Stevens-Johnson Syndrome concerns

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × NON-STIMULANT-NOT FDA APPROVED

### + Sustained Release

- × Bupropion (Wellbutrin SR)

- × Bupropion (Wellbutrin XL)

## × OTHER

- + Omega-3 and Omega-6 fatty acids

([http://www.medscape.com/viewarticle/514770\\_print](http://www.medscape.com/viewarticle/514770_print))

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ STIMULANTS AS FIRST-LINE THERAPY ESPECIALLY WHEN NO CO-OCCURRING DISORDER EXISTS
- ✘ ATOMOXETINE MAY BE BETTER IF ANXIETY OR SUBSTANCE ABUSE EXIST OR IF FAMILY CONCERNED ABOUT ADDICTION
- ✘ MULTIMODAL TREATMENT STUDY OF CHILDREN WITH ADHD (MTA) SHOWED THE RELATIVE ADVANTAGE OF DRUG THERAPY BEGAN TO FADE AT 24 MONTHS AND SOMETIMES DISAPPEARED AT 36 MONTHS
- ✘ CLASSROOM INTERVENTIONS AND PARENT TRAINING TECHNIQUES HELPFUL WITH CHILDREN BUT LITTLE DATA EXISTS REGARDING EFFECTS ON ADOLESCENTS

# PSYCHOSTIMULANTS AND ADDICTION RISK

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“In comparing ADHD adults with comparable symptoms, those who had not received medication as children were three times more likely to succumb to drug addiction later in life than those who had received medication.”

Wilens, Harvard Medical School

[www.sciam.com](http://www.sciam.com), January, 2005, pg. 54

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- ✘ Stimulants-Side Effects (greater with AMPH vs. MPH)
  - + Delayed sleep onset
  - + Reduced appetite (most common sustained)
    - ✘ CAN ALSO SEE WITH STRATTERA
  - + Abdominal pain
    - ✘ CAN ALSO SEE WITH STRATTERA
  - + Jitteriness
  - + Headache
  - + Motor and vocal tics (controversial)
  - + Growth effects
    - ✘ No adult variation in height or weight (NIH)
    - ✘ May be dose-related

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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## ✘ INSOMNIA

- + MOVE MEDICATION TO EARLIER TIME
- + DOSAGES REDUCED OR SHORT-ACTING UTILIZED
- + LOW DOSES OF CLONIDINE OR TRAZADONE MAY BE EFFECTIVE
- + MELATONIN

## ✘ APPETITE SUPPRESSION

- + HIGH-CALORIE DRINKS WHEN MED EFFECTS DIMINISHED
- + DOSE REDUCTIONS, DRUG HOLIDAYS OR SWITCH MEDS

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × FINE TUNING

### + MORNING PERSON-RUNS OUT OF MENTAL ENERGY IN AFTERNOON

- × Avoid difficult afternoon classes
- × Encourage afternoon physical activity
- × Homework may require supplemental medication after school
  - \* Rebound symptoms more likely without supplemental
- × Concerta , Daytrana, Adderall XR

# ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

## × FINE TUNING

### + AFTERNOON PERSON-HARD TO GET STARTED IN MORNING

- × Schedule difficult classes in mid-day
- × Wake-up early to give medication (short acting) and sustained release later
- × Encourage morning physical activity
- × Evaluate sleep patterns
- × Ritalin LA, Focalin XR, Adderall XR, Daytrana

# ADHD: MANAGEMENT

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- ✗ Instruction to patient

- ✗ Behavioral

  - + Assess abilities-

  - + Structured environment

  - + Training parents

    - ✗ Parent-Child Interaction Therapy (PCIT)

      - ★ Originally used with Child-Onset Conduct Disorder

      - ★ May be effective with severe behavioral problems

      - ★ Zisser, A., & Eyberg, S.M. (2010). Treating oppositional behavior in children using parent-child interaction therapy. In A.E. Kazdin & J.R. Weisz (Eds.) *Evidence-based psychotherapies for children and adolescents* (2nd ed., pp. 179-193). New York:

# PARENT-CHILD INTERACTION THERAPY (PCIT)

- ✘ Parent-Child Interaction Therapy (PCIT) is an empirically-supported treatment for conduct-disordered young children that places emphasis on improving the quality of the parent-child relationship and changing parent-child interaction patterns. In PCIT, parents are taught specific skills to establish a nurturing and secure relationship with their child while increasing their child's prosocial behavior and decreasing negative behavior. This treatment focuses on two basic interactions: Child Directed Interaction (CDI) is similar to play therapy in that parents engage their child in a play situation with the goal of strengthening the parent-child relationship; Parent Directed Interaction (PDI) resembles clinical behavior therapy in that parents learn to use specific behavior management techniques as they play with their child.

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+ **CHADD** (Children and Adults with Attention-Deficit/Hyperactivity Disorder) is the nation's leading non-profit organization serving individuals with AD/HD and their families. CHADD has over 16,000 members in 200 local chapters throughout the U.S. Chapters offer support for individuals, parents, teachers, professionals, and others.

- × Attention Magazine

- × Free Discount Prescription Card offered by CHADD

+ Communication with teacher

- × Daily Behavioral Report Cards (school-home notes)

  - \* School report invokes home-based contingencies

# BEHAVIORAL CONTINGENCIES

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## ✘ To Reduce Unwanted Behavior

- + Present something undesirable (additional chores)

  - ✘ “Positive Punishment”

- + Keep something desirable (restrict access to video games)

  - ✘ “Negative Punishment”

## ✘ To Increase Desired Behavior

- + Provide something desirable (borrow the car)

  - ✘ “Positive Reinforcement”

- + Remove or reduce aversive conditions

  - ✘ “Negative Reinforcement”

# Other Approaches

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- ✘ Mindfulness Training
  - + UCLA study-reduction in impulsivity
- ✘ Social Skills Training
  - + Failed to show effectiveness
  - + May be failure to generalize skills
- ✘ Homework Management Plan
  - + Secondary school youth
  - + Specific amount of time each evening for homework even if youth states “no homework”
  - + Pilot data indicates improvement
- ✘ In-sight Driven Individual
  - + Generally less effective

# STRUCTURE

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- ✘ AM Protocol
  - + White board or check-off sheet
- ✘ Daily schedule
  - + **Consistent** wake-up time
  - + **Consistent** home work time
  - + **Consistent** “high energy” time
  - + **Consistent** bed time
- ✘ “SAFE” places

# SUMMARY OF RESEARCH FINDINGS

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- ✘ Quality of relationship is stronger predictor of outcome than experience level, theoretical orientation, or education
- ✘ Clients perception of relationship better predictor than therapists perception
- ✘ No correlation between length of time and strength of alliance
- ✘ Clients usually do not report negative reactions to clinician prior to terminating

# THERAPEUTIC OUTCOME

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- ✘ Poor outcome cases show greater evidence of negative interpersonal process
- ✘ Some therapists are consistently more helpful than others
  - + Negative process or “ruptures” are inevitable
  - + Can the clinician deal therapeutically with these challenges
    - ✘ Central mechanism of change
      - ★ Rogers unconditional positive regard

# THERAPEUTIC RELATIONSHIP

After approximately a half century of research, one of the most consistent findings is that the quality of the therapeutic alliance is the best predictor of treatment success.



# SETTING LIMITS

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Too Strict

Too Loose

*Where does all of this stuff come from?*

# A “GOOD PARENT” SETS “GOOD LIMITS”

**FAIR**  
**CONSISTENT**  
**AVAILABLE**

# APPROPRIATE DISCIPLINE

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- ✘ Based on rules that are so simple that staff can even understand them
- ✘ Are a product of “carefrontation” and not confrontation
- ✘ Avoids the destructive lessons of the past

# CREATION OF A HEALTHY FAMILY

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**At a fundamental level the clients ability to trust, hope and have faith in the therapists ability to help always plays a central role in the change process.**

# CLIENT AND FAMILY RESOURCES

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× [www.adhdsupport.com](http://www.adhdsupport.com)

× [www.myadhd.com](http://www.myadhd.com)

# OPPOSITIONAL DEFIANT DISORDER

- ✗ Recurring pattern of negativistic, defiant, disobedient and hostile behavior toward authority figures that persists for at least 6 months
  - + Losing one's temper
  - + Arguing with adults
  - + Actively defying requests
  - + Refusing to follow rules
  - + Deliberately annoying others,
  - + Blaming others
  - + Touch, easily angered, resentful and spiteful or vindictive
  - + Stubborn

# OPPOSITIONAL DEFIANT DISORDER

- ✗ ODD may be a precursor to Conduct Disorder
- ✗ Comorbidity with ADHD-50-65%
- ✗ Before puberty more common in boys; after puberty almost exclusively in boys
- ✗ Usually manifests by 8 yo
- ✗ Underarousal to stimulation often found
- ✗ Prenatal exposure to toxins, alcohol and poor nutrition could be factors

# OPPOSITIONAL DEFIANT DISORDER

## × CLINICAL COURSE

- + TODDLERS-Temperamental factors like irritability, impulsivity and intensity of reactions to negative stimuli can lead to parental “negative cycle”
- + SCHOOL AGE-Defiance toward teacher and other authority figures and aggression toward peers
- + AS GET OLDER- A tendency toward more antisocial behaviors
  - × Noncompliance with commands
  - × Emotional overreaction to life events
  - × Failure to take responsibility

# OPPOSITIONAL DEFIANT DISORDER

## × MANAGEMENT

- + If occurs with ADHD, treating the ADHD may help restore focus and decrease impulsivity
  - × This will allow social and behavioral interventions to be more effective
- + Parent Management Training (PMT)
- + Group therapy for adolescents is most beneficial when it is structured and focused on developing the skills of listening, empathy, and effective problem solving

# CONDUCT DISORDER

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## × Diagnostic Criteria

- + Aggression to people or animals
- + Destruction of property
- + Deceitfulness or theft
- + Serious violations of rules

## × Subtypes

- + Child-Onset
- + Adolescent-Onset

# CONDUCT DISORDER

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## × CLINICAL COURSE

- + As early as age 2-irritable temperament, poor compliance, inattentiveness and impulsivity
  - × Can lead to an initial diagnosis of ADHD or ODD and later to CD
  - × Can occur despite good efforts by parents but commonly exist in unstable families
  - × Sometimes a history of parental psychopathology including conduct and legal problems
  - × Child's temperament difficulties lead to a “negative cycle” leading to parents giving up or resorting to more severe forms of punishment

# CONDUCT DISORDER

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## × CLINICAL COURSE (CONTINUED)

### + ELEMENTARY SCHOOL

- × Continued aggressive tendencies toward adults and peers
- × Lack of social skills precludes appropriate interaction with peers and don't pay attention to social cues
- × Learn to use intense anger and aggression and lack ability to solve social problems
- × Comorbidity with ADHD is about 50% and may impede learning

# CONDUCT DISORDER

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## × CLINICAL COURSE (CONTINUED)

### + MIDDLE AND HIGH SCHOOL

- × By middle school age the three classes of behavior identified by Patterson and Forgatch are imbedded
  - ★ *Noncompliance with commands*
  - ★ *Emotional overreaction*
  - ★ *Failure to take responsibility*
- × *Continued aggression creates peer rejection at the time it is most important leading to joining deviant peer groups*
- × Depression and anxiety are common (32-37%) as are learning disorders

# CONDUCT DISORDER

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## × CLINICAL COURSE (CONTINUED)

- + Adolescent onset-when appropriate social skills with peers are developed and academic skills acquired, most reduce rate of conduct problems especially those without a history of aggression and whose conduct problems are mostly toward property (stealing)
- + Child onset- highly correlated with adult diagnosis of Antisocial Personality Disorder
- + Substance abuse is prevalent

# CONDUCT DISORDER: MANAGEMENT

## ✘ Child-Onset

- + Non-normative peer relations
- + Onset prior to 10 yo
- + Aggressive style may be predatory
- + Genetics involved
- + Predominantly male

## ✘ Management

- + Goal
- + Business-like and behavioral
- + Observers

# CONDUCT DISORDER: MANAGEMENT

## ✘ Adolescent-Onset

- + Normative peer relations
- + Onset after 10 yo
- + Emotional or passive-aggressive acting-out
- + Environmentally predominant
- + 50% male and female

## ✘ Management

- + Developmental
- + Personality immaturity
- + Role models and surrogates

# CONDUCT DISORDER: MANAGMENT

- ✘ No medications have been consistently effective when ADHD is not present. Stimulant medications can help control impulsivity, hyperactivity and inattention but doesn't help improve parent-child , teacher-child or peer relationships. Care should be taken if substance abuse in student or in family is reported.
  - + Lithium and methylphenidate reduced aggressiveness in one set of studies
  - + Carbamazepine (Tegretol) has been shown to be effective with aggressive behaviors
  - + Clonidine may be helpful
  - + 1st line-methylphenidate, 2<sup>nd</sup> line-anticonvulsants, 3<sup>rd</sup> line-lithium

# CONDUCT DISORDER: MANAGEMENT

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- ✘ A multidisciplinary approach is required
  - + For ODD and CD consider parent management training (PMT)
    - ✘ Parents are trained to alter the child's behavior at home
    - ✘ Based on theory that conduct problems inadvertently are developed and sustained by maladaptive parent-child interactions
    - ✘ PMT alters the pattern of ineffective parenting by encouraging the parent to practice prosocial skills (positive, specific feedback for desired behaviors, playing with the child), employ the use of natural and logical consequences, and use effective, brief and nonaversive punishments when encouragement and consequences are not effective
    - ✘ Severity of problem is key predictor of failure although the earlier the onset of treatment the better
    - ✘ “wrap arounds”

# CONDUCT DISORDER: MANAGEMENT

- ✗ A multidisciplinary approach is required
  - + Severe conduct problems in adolescent are the most treatment resistant
  - + Treatment needs to be highly structured using behavioral techniques to improve communication and reinforce prosocial behaviors with clear discipline
  - + Group treatment has benefits and drawbacks
    - ✗ Benefits for 12 and under
  - + Best results with younger children when parents attend PMT while child attends social skills classes

# CONDUCT DISORDER: MANAGEMENT

- ✗ **A multidisciplinary approach is required**
  - + *Boot camps yield good initial results but poorer long-term outcomes with higher rates of arrests and serious crimes found in graduates*
  - + *Individual psychotherapy not proven effective but can facilitate compliance*
  - + *Multisystemic package includes PMT, social skills training, academic support, pharmacological treatment of ADHD and depression and individual counseling as needed*

# OTHER DISRUPTIVE DISORDERS OF CHILD AND ADOLESCENT ONSET

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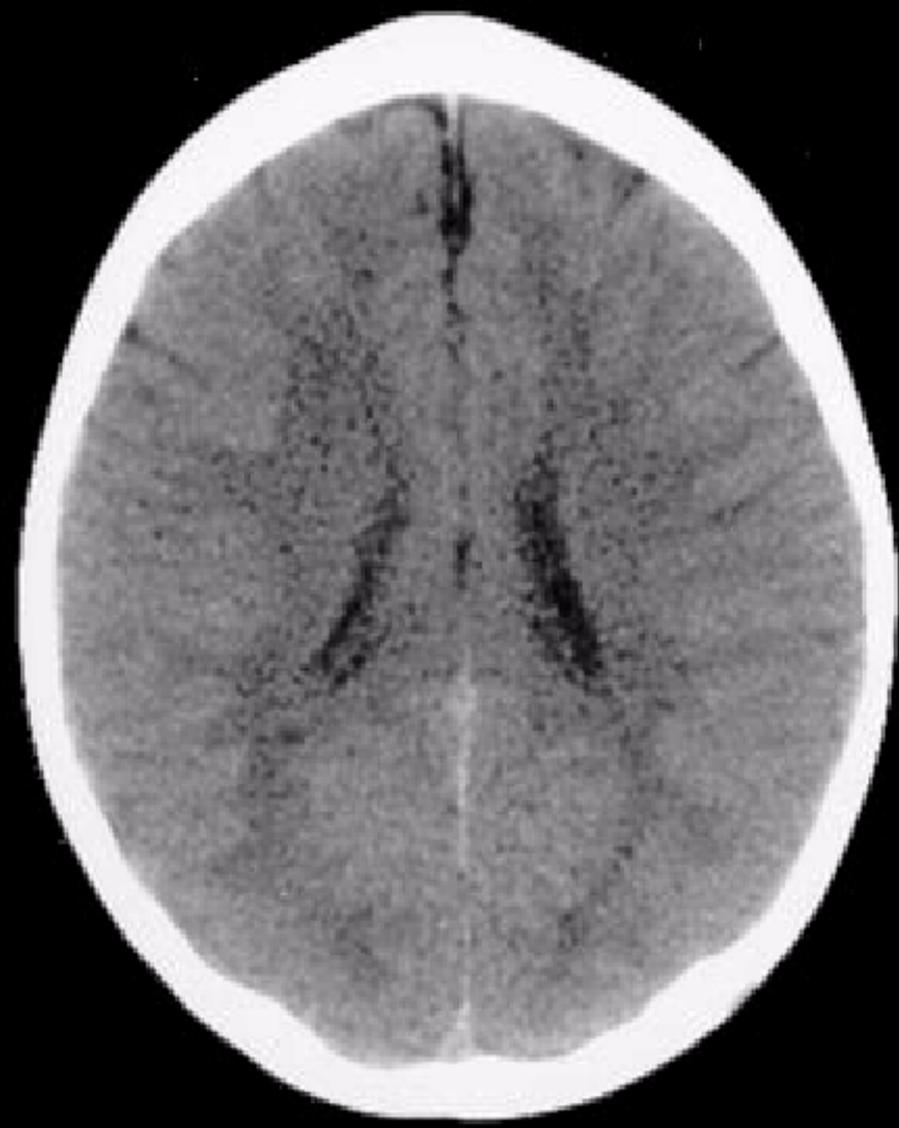
- ✘ Adjustment Disorder
- ✘ Substance Abuse Disorders
- ✘ Mood Disorders
- ✘ Mania
- ✘ Psychotic Disorders
- ✘ Antisocial Behavior
- ✘ Personality Disorders
  - + Borderline Personality Disorder

# ADJUSTMENT DISORDER

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- ✘ CLINICALLY SIGNIFICANT EMOTIONAL OR BEHAVIORAL SYMPTOMS IN RESPONSE TO AN IDENTIFIED PSYCHOSOCIAL STRESSOR(S)
- ✘ ONSET OF SYMPTOM,S WITHIN 3 MONTHS OF STRESSOR
- ✘ SYMPTOMS MUST RESOLVE WITHIN 6 MONTHS AFTER RESOLUTION OF STRESSOR
  - + ACUTE-PERSISTENCE OF SYMPTOMS FOR LESS THAN 6 MONTHS
  - + CHRONIC-DURATION OF DISTURBANCE IS LONGER THAN 6 MONTHS DUE TO CHRONIC STRESSOR
- ✘ WITH DEPRESSED MOOD, WITH ANXIETY, WITH DISTURBANCE OF CONDUCT, WITH MIXED ANXIETY AND DEPRESSED MOOD,OR MIXED DISTURBANCE OF EMOTION AND CONDUCT

# 3 Year Old Children



Normal



Extreme Neglect

# MISATTUNED PRIMARY CAREGIVER

- ✘ Lack of “resonance”
- ✘ Triggers dysregulated states
- ✘ Not able to repair these states
  - + States become traits
  - + Defenses are embedded in evolving personality
  - + Potential Personality Disorders
    - ✘ Borderline Personality Disorder

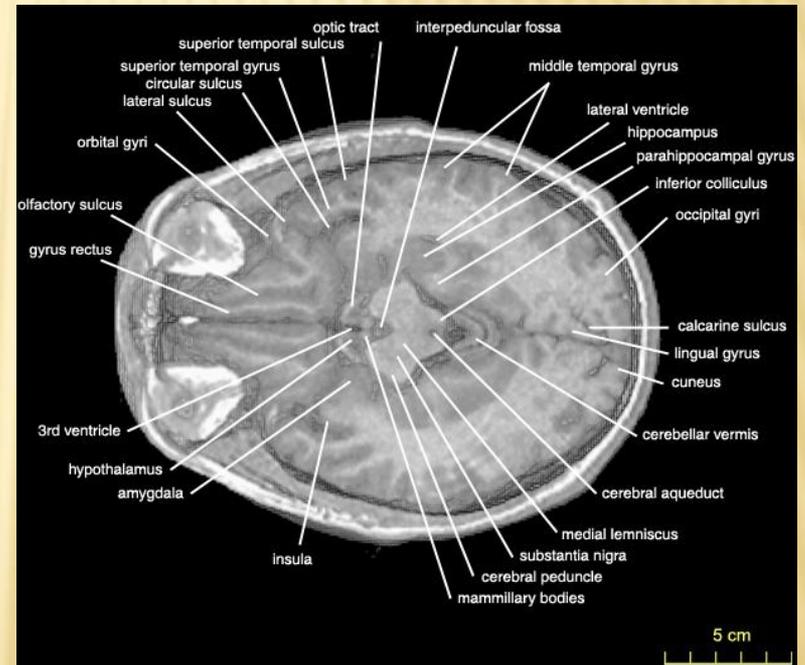
# MALADAPTIVE BRAIN DEVELOPMENT

- ◆ Especially secondary to “relational trauma”
  - ◆ *Severe Affective Dysregulation*
    - ◆ Loss of emotional self-regulation
    - ◆ Expressed as loss of ability to regulate the Intensity and Duration of affect

## STRESS MANAGEMENT

# MALADAPTIVE BRAIN DEVELOPMENT

*Paralimbic areas of the right hemisphere are preferentially involved in the storage of traumatic memories*



# INDIVIDUAL VARIABILITY

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- ✘ Genetic/biological
- ✘ Resiliency
- ✘ Personality development
  - + Attachment
- ✘ Prior and subsequent life events
- ✘ Supportive structure
- ✘ Age and sex
- ✘ Type of trauma
- ✘ Personal interpretation

# GENDER

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## ✘ Male

- + Limbic system has different connectivity patterns
- + Delayed cerebral maturation
- + More susceptible to “relational” abuse
- + Hyperarousal pattern
- + Externalizing disorders
  - ✘ Conduct Disorder
  - ✘ ADHD



# GENDER

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## ✗ Female

- + Dissociation
- + Internalizing disorders
  - ✗ Affective Disorders
  - ✗ Anxiety Disorders
  - ✗ Somatoform Disorders
    - ✗ Conversion Disorder
    - ✗ Pain Disorder
    - ✗ Hypochondriasis



# COMPLEX POSTTRAUMATIC STRESS DISORDER (DESNOS)

- × Repeated inescapable early life trauma
- × Multigenerational trauma
- × May have genetic basis
  - + Gene coding for dopamine transporter (DAT)
- × Involves changes in *physiology, self and identity, memory and dissociation*

# TOP DOWN INHIBITION

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ORBITOFRONTAL CORTEX (OFC)  
ANTERIOR CINGULATE GYRUS (AC)



HYPOTHALAMUS

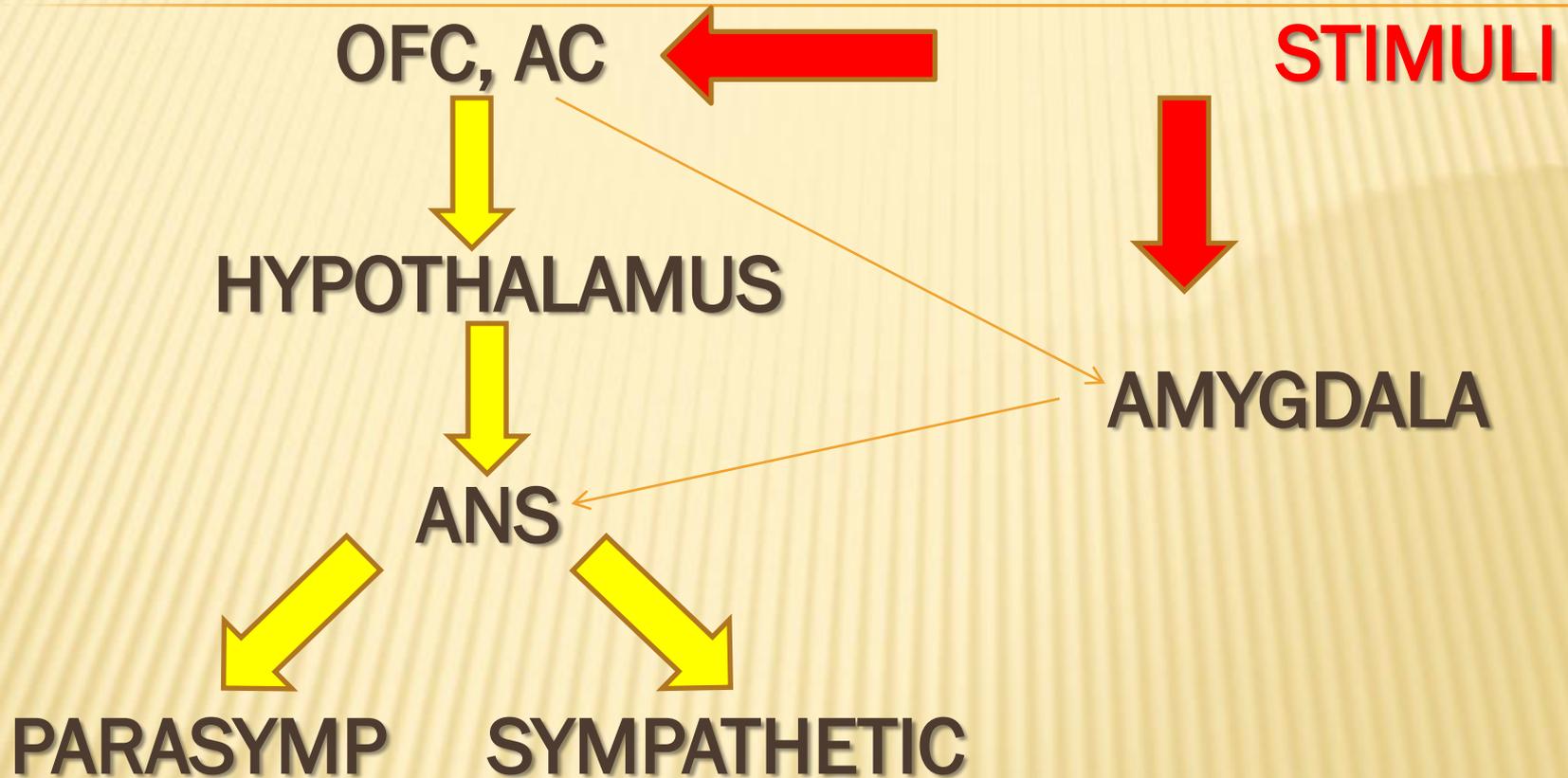


PITUITARY



HEAD GANGLION (ANS)

# BOTTOM UP EXCITATION



# COMPLEX POSTTRAUMATIC STRESS DISORDER (DESNOS)

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## × *PHYSIOLOGICAL*

- + AFFECT REGULATION AND IMPULSE CONTROL
- + SOMATIZATION AND MEDICAL PROBLEMS

## × *SELF AND IDENTITY*

- + ALTERED SELF AND OTHER PERCEPTION
- + ALTERED WORLD VIEW

## × *CONSCIOUSNESS*

- + ALTERED ATTENTION AND CONSCIOUSNESS

# SELF AND IDENTITY

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- ✘ Insecure attachment
  - + Disorganized type
- ✘ Disorganized attachment themes
  - + HELPLESSNESS
    - ✘ Abandonment
    - ✘ Betrayal
    - ✘ Failure
    - ✘ Dejection

# ABANDONMENT FEAR

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TRAUMA → ATTACHMENT PROBLEMS →

ABANDONMENT FEAR → INCREASED ANXIETY →

INCREASED IMPULSIVITY

# SELF AND IDENTITY

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- ✘ Disorganized attachment themes
  - + COHERSIVE CONTROL
    - ✘ Blame
    - ✘ Rejection
    - ✘ Intrusion
    - ✘ Hostility
- ✘ Borderline Personality Disorder

# SELF AND IDENTITY

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- ✘ Attachment styles reflect that of the primary caretakers
- ✘ Some are excessively self-sufficient while others are constantly anxious and insecure
- ✘ Those exposed to the greatest abuse (or are the most vulnerable) have disorganized/dissociative styles emotional lability, shifting relationships, self injury, etc.

# SELF AND IDENTITY

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- × A secure attachment is associated with:
  - + Reduced firing of amygdala
    - × Less anxiety
  - + Increased nucleus accumbens activity
    - × Enhanced reward in relationships
  - + Reduced firing of orbitofrontal cortex
    - × Reduced criticism of others

# SELF AND IDENTITY

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- **Secure attachment with therapist**
  - Involves Right Hemisphere (RH) RH to RH nonverbal communication
  - In a safe environment
  - Liberates client from past constraints of rigid personality
  - Facilitates self-observation (active scanning of inner-world)
  - Observe without criticism or evaluation
  - Enhances capacity for introspection
  - Reduces prediction error

# **RIGHT HEMISPHERE (RH)**

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- ✘ ONE UNCONSCIOUS MIND COMMUNICATES WITH ANOTHER UNCONSCIOUS MIND**
- ✘ RH RESPONDS QUICKLY TO ALL STIMULI**
- ✘ IMPLICIT LEVEL OF THE THERAPEUTIC ALLIANCE (BENEATH THE EXPLICIT COGNITIONS AND LANGUAGE) ARE THE CORE OF THE CHANGE MECHANISM AT THE UNCONSCIOUS LEVEL**

# **RIGHT HEMISPHERE (RH)**

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- ✘ INVOLVES CO-CREATION OF AN INTERSUBJECTIVE CONTEXT THAT FACILITATES THE PROCESS OF CHANGE (ATTACHMENT COMMUNICATION)**
- ✘ ATTACHMENT COMMUNICATION REPRESENTS RH TO RH TRANSACTION THAT FACILITATE THE EXPERIENCE DEPENDENT MATURATION OF RH**

# **RIGHT HEMISPHERE (RH)**

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- ✘ EMOTIONAL AVAILABILITY OF CAREGIVER IN INTIMACY SEEMS TO BE THE CENTRAL GROWTH PROMOTING FACTOR IN EARLY REARING EXPERIENCE**
- ✘ CAREGIVER MAXIMIZES POSITIVE AFFECT AND MINIMIZES NEGATIVE AFFECT**
- ✘ PROMOTES INCREASED TOLERANCE FOR POSITIVE AND NEGATIVE AFFECT (AFFECTIVE RANGE)**

# **RIGHT HEMISPHERE (RH)**

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- ✘ THE BROADER THE RANGE OF EMOTIONS THAT A CHILD EXPERIENCES THE BROADER WILL BE THE EMOTIONAL RANGE OF THE SELF THAT DEVELOPES**
- ✘ THERAPEUTIC ALLIANCE**
  - + THERAPIST'S FACILITATING BEHAVIORS COMBINE WITH THE PATIENTS CAPACITY FOR ATTACHMENT TO PERMIT DEVELOPMENT OF ALLIANCE (PRIMARY COMPONENT OF EMOTIONAL BOND)**

# **RIGHT HEMISPHERE (RH)**

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- ✘ THERAPEUTIC ALLIANCE (CONTINUED)**
  - + KEY IS HOW TO BE SUBJECTIVELY WITH PATIENT ESPECIALLY DURING AFFECTIVELY STRESSFULL MOMENTS**
    - ✘ UNCONSCIOUS INTERSUBJECTIVE PROCESSES INCLUDE EMPATHY, IDENTIFICATION WITH OTHERS AND SELF-AWARENESS**
  - + FACIAL EXPRESSIONS CAN BE APPRAISED BY THE RH WITHIN 30 MILLISECONDS**
    - ✘ MAY TAKE HOURS TO DAYS TO GET INTENSE REACTION BACK TO BASE LINE**

# **RIGHT HEMISPHERE (RH)**

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- ✘ MUST BE ATTENTIVE TO LH PATIENT VERBALIZATIONS IN ORDER TO OBJECTIVELY DIAGNOSE AND UNDERSTAND PATIENTS DYSREGULATED SYMPTOMS**
- ✘ BUT ALSO ATTENTIVE INTERSUBJECTIVELY TO RELATIONAL TRANSACTIONS (REFLECT EMOTIONS SUCH AS APPROVAL/DISAPPROVAL, SUPPORT, HUMOR AND FEAR)**
  - + FACIAL EXPRESSIONS**
  - + BODY POSTURE**
  - + TONE AND TEMPO OF VOICE**

# **RIGHT HEMISPHERE (RH)**

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## **✘ CARL ROGERS (1986)**

**“AS A THERAPIST, I FIND THAT WHEN I AM CLOSEST TO MY INNER, INSTINCTIVE SELF, WHEN I AM SOMEHOW IN TOUCH WITH THE UNKNOWN IN ME, WHEN PERHAPS I AM IN A SLIGHTLY ALTERED STATE OF CONSCIOUSNESS IN THE RELATIONSHIP, THEN WHATEVER I DO SEEMS FULL OF HEALING.”**

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