The Mental Health and Wellbeing of Children and Adolescents who are affected by Autism and Related Disorders

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Autism Spectrum

- Defined by the following:
  - Difficulty forming and engaging in reciprocal social interactions
  - Difficulty communicating with others
  - Need for routine and ritual
    - Difficulty tolerating change
- Social and communication delays present prior to the age of 3 years
As a parent:
- One is only as happy as one’s unhappiest child

As a family:
- One person’s distress impacts all in the family

As a community:
- Raising a child with autism takes a village
‘Uncomplicated’ Autism Spectrum Disorders (ASD)

• Social
  – Development of social skills

• Communication
  – Functional language

• Restricted interests/repetitive behaviors
  – Increased flexibility over time

• Absence of significant co-occurring conditions
  – Attention, level of activity, impulsivity
  – Impulse control
Review of Concepts

- ‘Complicated’ ASDs
  - Medical
    - Gastrointestinal Disorders
    - Seizure Disorders
  - Emotional and Behavioral
    - Psychiatric Disorders
Psychiatric Disorders in Children with Autism

- 70% percent of children had at least one co-morbid disorder and
- 41% had two or more.
- The most common diagnoses
  - social anxiety disorder (29%)
  - attention-deficit/hyperactivity disorder (28%)
- Of those with ADHD, 84% received a second co-morbid diagnosis

Simonoff et al. 2008
Development Over Time

• Autism
  – Stable emotional and behavioral features

• Autism + emotional and behavioral dysregulation
  – Very early presentation of emotional and behavioral dysregulation
    • Inattention/hyperactivity
    • Aggression directed at self and others
    • Irritability

• Autism and new onset co-morbidity

• Autism + emotional and behavioral dysregulation + new onset co-morbidity
Emotional and Behavioral Presentation

• When is treatment indicated
  – Level of distress
  – Presentation of symptoms and behaviors in multiple settings
    • School/college
    • Vocational/day program
    • Home
    • Social settings
  – Overall impairment of functioning
Co-occurrence in ASD

- Mood Disorders
  - Depression
  - Bipolar spectrum disorders
- Anxiety
  - Phobias
  - Social anxiety disorder
  - Obsessive-compulsive disorder
  - Post traumatic stress disorder
- Disruptive Behavioral Disorders
  - ADHD
Autism and OCD

- Can children with autism have OCD?
ASK ME ABOUT MY SOCIAL ANXIETY
Co-occurrence in ASD

- Impulse Control Disorders
  - Aggression
  - Eating disorder
  - Self injury
- Other
  - Tourette Disorder
  - Sleep disorders
  - Catatonia
  - Psychotic Disorders
Treatment Approaches

- Behavioral therapy
  - Starting point
    - Particular focus on disruptive behaviors and impulse control issues
- Cognitive-behavioral therapy
  - Includes exposure and response prevention
    - Focus on anxiety spectrum disorders
- Couples and Family therapy
Managing Anxiety in People with Autism

A Treatment Guide for Parents, Teachers, and Mental Health Professionals

Anne M. Chalfant, Psy.D.
Treatment Approaches

• Social Interventions
  – Exercise programs
  – Recreational programs
Medication Treatment Approaches

• Targeting:
  – Co-occurring conditions
Medication Treatment: Classes of Psychotropic medications

• Antidepressants
  • Selective serotonin re-uptake inhibitors
    – Example: Prozac, Zoloft, Lexapro
  • Serotonin and norepinephrine re-uptake inhibitors
    – Example: Effexor

• Neuroleptics
  • Typical
    – Example: Thorazine
  • Atypical
    – Example: Risperdal and Abilify
Medication Treatment: Classes of Medications

• Psychostimulants
  • Examples: Ritalin, Adderall, Vyvanse

• Non stimulant treatments ADHD
  • Example: Strattera
Medication Treatment: Classes of Medications

• Alpha Agonists
  • Examples: Catapress, Kapvay, Tenex, Intuniv

• Mood stabilizers
  • Examples:
    – Depakote
    – Lithium
    – Lamictal
    – Tegretol
    – Topamax
    – Trileptal
Pharmacological Treatment: Classes of Psychotrophic medications

• Anti-anxiety medications
  – Benzodiazepines
    – Examples: Ativan and Klonopin

• Other
  – Example: Buspar
Categories of Medication Used by Children with ASD
Based on IAN Data as of 03/20/08

- Stimulants: 31%
- Neuroleptics: 26%
- Antidepressants: 22%
- Anticonvulsants: 11%
- Anxiolytics: 3%
- Antifungals: 3%
- Other: 4%

n=3,140 medications
“Melt Downs”
Why do they occur?
WARNING
AUTISM MELTDOWN PROBABILITY HIGH
What Factors are Involved?

- Physical discomfort
  - Pain from dental, gastrointestinal origin, headache
- Cognition
  - Rigidity and inflexibility
- Emotion
  - Emotion regulation
- Anxiety
  - Ability to tolerate uncertainty
- Impulse Control
  - Ability to manage frustration
- The person’s experience of the sensory world
A Traditional Psychiatric Approach to Melt Downs

• Examine the frequency, duration and intensity
• Look for a change from baseline
  – If present, may indicate new onset disorder
• Identify
  – The experience of anxiety
    • Look for anxiety disorders
      – Obsessive-compulsive disorder
      – Post Traumatic Stress Disorder
  – Changes in mood
    • Identify mood disorders
      – Depression, atypical Mood Disorders and Bipolar Disorder
A Traditional Psychiatric Approach to Melt Downs

- Identify
  - Impulse control disorders
    • Rage
      - Look for the presence of self injurious behavior
  - Sleep disorders
    • Insomnia
      - Look for fatigue
Intense World Theory of Autism
Intense World Theory of Autism

• Sensory perception
• Attention
• Memory
• Emotion
• Fear

Markram and Markram, 2010
Autism
Hyper-Attention

• Hyper-focus
  – Getting locked in
  – Obsessive attention

• Tremendous difficulty with attention on demand
  – Internal hyper-focus
Relevance

• How is the theory relevant to our understanding of melt downs
  – Be aware of the child’s sensory experience prior to the onset of the explosions
  – Understand that this world is being perceived and attended to in different way
  – Look for past memories
    • Look for fear triggered responses
  – Realize that emotional dysregulation is occurring
    • Approach needs to be calm with neutral-positive affect
Novel Treatment Approaches

• Address the core concerns in autism
  – Feeling connected and engaged with selected friends and family
  – Improve the ability to identify the emotional states and thoughts of those around
  – Have the ability to communicate effectively
  – Be flexible and have the ability to tolerate change
Oxytocin

The Social Peptide
Oxytocin

• Oxytocin promotes social and approach behaviors by reducing the feeling of threat or sense of being unsafe
  – (Di Simplicio et al, 2009)
• Oxytocin increases gaze specifically toward the eye region of human faces
  – (Guastella et al, 2010)
• Data suggest that oxytocin improves the ability to correctly identify the mental state of others from social signals from the eye region
  – (Domes et al, 2007)
Role of Genetics in Guiding Treatment

• Genetic work-up which would include looking for Fragile X, Retts and other syndromes
• Microarray analysis should be standard protocol for all children on the autism spectrum
• Rates between 20-40 % of individuals with ASD have an identifiable genetic marker
Fragile X

• Identified the genetic mechanism underlying Fragile X
• We now have targeted treatments directed at reversing the damage to neurons and neuronal transmission
• Animal models of Fragile X have shown that treatment with certain drugs results in a reversal of neuronal damage and a recovery of skill
Thank you