



# Medication Primer for Bipolar Disorder in Kids

A Psychologist's Perspective  
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# Is Every Irritable Kid Bipolar?

- Irritability may be a psychiatric disorder
  - Chemical imbalance or personality disorder
    - Depression, PTSD, ADHD
    - Bipolar Disorder: Mania
    - Borderline personality disorder
    - Antisocial personality disorder
- Irritability may be a neuropsychiatric disorder
  - Birth disorders, traumatic brain injury, seizures
    - Genetic disorder
    - Alcohol or drugs during pregnancy
    - Difficult delivery – anoxia at birth
  - Irritability may be due to substance abuse

# Child-Onset Bipolar Disorder

- Diagnostic controversy:
  - Is Child-Onset (prepubertal) Bipolar Disorder just an early step in the evolution of classic adult Bipolar Disorder?
    - Biederman et al., 1999, 2004
  - Or, should we consider severe mood and irritability problems in children a completely different condition?
    - Leibenluft et al., 2003

# What about adolescent bipolar?

- Adolescent Bipolar- less controversial
  - May meet DSM IV criteria for bipolar I or II
    - Bipolar I – Manic (elated, irritable) for at least a week, with marked impairment in social or occupational activities or hospitalization, plus 3 symptoms (grandiose, euphoric, racing thoughts, pressured speech, no need for sleep, reckless)
    - Bipolar II – Hypomanic (elated, irritable) for four days, no marked impairments or hospitalization, plus 3 symptoms from the above list.



# Controversy Notwithstanding

- Severe mood and irritability issues need to be treated no matter what the label.
  - Call it Child-Onset Bipolar Disorder
  - Call it Intermittent Explosive Disorder
  - Call it Explosive Mood Disorder
  - Call it Organic Aggression Syndrome
- Treatments are similar: medication, psychosocial interventions, and school accommodations. (Let us call it Bipolar)



# Bipolar - School Impairment

- Bipolar Children show high prevalence of academic dysfunction:
  - Reading/Writing
    - 42% (Wozniak, 1955)
    - 46% (Pavuluri, 2006)
  - Math
    - 30% (Wozniak, 1955)
    - 29% (Pavuluri, 2006)
- Also, Behavior Problems in school:
  - 79% (Geller, 2002)

# Why Academic Problems?

- Not just a behavior or emotion problem
  - Child Onset Bipolar Disorder kids show:
    - Neuropsychological deficits (brain problems):
      - Memory problems are common
      - Lower verbal reasoning
      - Poor attention span
      - Slower processing speed
      - Decreased cognitive flexibility
    - Neurocognitive deficits persist even after “recovery” from mania and depression.



# Mania-Specific Deficits



- Kids with mania may show:
- ADHD Symptoms:
  - hyperactivity, distractibility, impulsivity
  - Intense energy; Talks too much
- Irritability
  - Uncooperative, oppositional, aggressive
- Elated mood, grandiosity
  - Giggly, reckless, feels superior to teachers

# Depression-Specific Deficits

- Psychomotor retardation
  - Slowness, lack of energy, no motivation
- Negativity
  - I'm no good, never will be any good
- Poor concentration
  - Loss of interest, apathetic, flat emotions
- Moody
  - Sad: feels worthless, hopeless, helpless



# General Bipolar Deficits

- Social skill deficits
  - Misinterpretation of jokes
  - Extreme shyness, irritability, or bullying
  - Peers may reject their bizarre behaviors
  - Perceive hostility in peer's neutral faces
- Medication side effects
  - Fatigue, dry mouth, dizziness, poor bladder control, constipation, weight gain, tremor, diarrhea, drooling, itching, sweating, sedation, poor cognition, etc.
- Absences (med changes, hospitalizations, etc.)

# Medication Subtypes



- Mood Stabilizers
  - Lithium and anticonvulsants
- Anti-psychotics
  - Second generation (atypical)
- Anti-depressants
  - Mostly SSRI's
- Stimulants
- Others

# Most Common Meds



- Mood Stabilizers

- Lithium (approved by FDA- ages 12 & up)

- Lithium carbonate – for mania and depression

- Anticonvulsant Mood Stabilizers

- Valproate (Depacote) for mania

- Carbamazepine (Tegretol) for mania

- Oxcarbazepine (Trileptal) for mania

- Topiramate (Topamax) for mania

- Lamotrigine (Lamictal) for mania

# Antipsychotics



- FDA approved, short term, ages 12-17
  - Risperidone (Risperdal)
  - Aripiprazole (Abilify)
- Off Label
  - Olanzapine (Zyprexa)
  - Quetiapine (Seroquel)
  - Ziprasidone (Geodon)
  - Clozapine (Clozaril)

# Antidepressants



- Mostly SSRI's
  - (selective serotonin reuptake inhibitors)
- Floxetine (Prozac)
- Paroxetine (Paxil)
- Escitalopram (Lexapro)
- Citaloprom (Celexa)
- Sertraline (Zoloft)
- Fluvoxamine (Luvox)

# Stimulants



- **Methylphenidate (Ritalin Metadate, Concerta, Daytrana)**
- **Dextroamphetamine (Dexedrine, Dextrostat)**
- **Amphetamine/dextroamphetamine (Adderall)**
- **Dexmethylphenidate (Focalin)**
- **Methamphetamine (Desoxyn)**
- **Lisdexamfetamin (Vyvanse)**
- **Pemoline (Cylert) not recommended due to liver failure**
- **Atomoxetine HCL (Strattera)**





Others

- **Alpha Adrenergic Agonists**

- **Clonidine (Catapres)**

- **Guanfacine (Tenex)**

- **Antianxiety Medication**

- **Lorazepam (Ativan)**

- **Alprazolam (Xanax)**

- **Diazepam (Valium)**

- **Clonazepam (Klonopin)**

# School Accommodations Needed

- Medication Side Effects

- Permanent bathroom pass

- Thirst issues, gastrointestinal distress

- Extra fluids/rest after gym

- Dehydration and overheating common

- Reduce written assignments

- Fatigue, hand tremor, and drowsiness issues

- Seat near door for access to nurse if needed

- Dizziness, blurring, nausea, rash issues

# Psychosocial Interventions

- Interpersonal Social Rhythm Therapy
  - Positive Discipline, don't try to punish it away
  - Mood and Behavior Diary; sleep/light cycles
  - Adding Structure: routines, rigid schedules
  - Pick your battles; clear rules & Contracting
  - Rebuilding family/school relationships
  - Crisis Plan: suicidal/violent behaviors
  - Stabilizing sleep, light, and activity patterns
  - Building self-esteem and coping skills
- Integrated: Meds, therapy, school

# School Accommodations Needed

- Social difficulties

- Peer assistant or buddy system
- Social skills training, match face to emotion
- Use social stories, or act out social situations
- Peer education regarding diversity
- Preferential seating – good peer role models
- Regular mental health counseling
- Speech help with “social” communications
  - take turns, monitor peer’s interest in topic

# School Accommodations Needed

- Agitation, episodic bad days
  - Schedule routine breaks
  - Extra time between classes
  - Preferential seating near natural light
  - Delay start, reduce demands, on bad days
  - Reduce homework, extend deadlines
  - Extra tutoring after absences
  - Email assignments to parents, if possible

# School Accommodations Needed

- Cognitive Impairments

- Emphasis on sight-words, not phonics
- More time for exams, and for class-work
- Visual aids for math, copies of assignments
- Highlight important material, reduce load
- Simplified instructions, condensed texts
- Use of tape recorder, calculator in class
- Get eye contact when giving directives

# School Accommodations Needed

- Irritability/Aggression/Meltdowns
  - Access to safe place when “ready to blow”
  - Seating that allows a “buffer space”
  - Resource room near end of day
  - Teach anger management
  - Teach self-calming techniques
  - Less competitive activities (e.g.: yoga)
  - Staff supervision in hallways, café, bus

# School Accommodations Needed

- Meltdowns in school –See it coming
  - Don't get in their face, gently redirect
  - Suggest deep breathing, chill out time
  - Keep your cool as kid gets hot tempered
- Crisis management
  - Look for glassy-eyed stare, grit teeth, fists up
  - Rage lasts only 10 minutes if you back off
  - Clear room, allow emotional “seizure”
  - Don't touch, avoid restraint if possible





# Summary

- Bipolar kids may get strong medications
- Bipolar kids may have ADHD/LD
- Bipolar kids may have social deficits
- Multiple medications often used
- These may cause serious side effects
- On top of good days and bad days
- Classroom accommodations are needed
- Crisis management strategy is needed



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