Moody Kids, Bipolar Disorder, and Medication Treatment Strategies

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Learning Objectives

- Distinguish symptoms of bipolar disorder from other common mental health disorders
- Realize that comprehensive assessment is needed
- Understand that the treatment of bipolar disorder includes therapy, medication, and case management
- Be aware of the pros and cons of medication options for bipolar disorder

Irritability and Anger are Nonspecific Symptoms

Bipolar Disorder
Severe Stress
Autistic Spectrum Disorders

Anxiety Disorders
PTSD / Abuse

Irritability
Anger

Depression
DMDD
Oppositional Defiant Disorder

Substance Use Disorders
ADHD

Mood Episodes

- Mania/Hypomania
  - Elated mood or irritability
  - Distractibility
  - Indiscretion
  - Grandiosity
  - Flight of ideas
  - Increased goal directed activity
  - Decreased need for Sleep
  - Talkativeness

- Depression
  - Sadness, irritability
  - Sleep problems
  - Loss of Interest
  - Hopelessness or Guilt
  - Low Energy
  - Poor Concentration
  - Change in Appetite
  - Psychomotor changes
  - Suicidal thoughts

Disruptive Mood Dysregulation Disorder (DMDD)

- Starts before age 10, no later than 18 yo
- Developmental age at least 6
- Chronically irritable for at least 1 year, without any good mood more than 3 months
- Verbal/physical anger outbursts 3x/week
- DMDD alone is rare in the clinics, many youth will have comorbid ADHD and conduct diagnoses
- Exclusion: They cannot have episode of mania

Bipolar vs. ADHD

These disorders can co-occur!
Pearls to Help with Diagnosis of Bipolar Disorder

- Mania Specific Symptoms
  - elation/euphoria
  - grandiosity
  - decreased need for sleep
  - Increased goal directed activity
  - hypersexuality (not due to sexual abuse/exposure)
- Distinct episodes—symptoms must cluster together in time and be different from child’s normal behavior

Diagnostic Difficulties

**Difficult and time consuming to diagnosis:**
- Differentiate from other psychiatric disorders
  - Moody ADHD/Disruptive Behavior Disorders
  - Disruptive mood dysregulation disorder
  - Non-bipolar depression
  - High functioning autism spectrum disorders
  - Severe anxiety disorders
- Bipolar disorder commonly co-occurs with other psychiatric disorders

True or False? “If she/he looks normal, she/he cannot be bipolar!”

Guiding Principles to Treatment of Youth with Bipolar Disorder

- Comprehensive assessment is key!
- Medication is only part of the approach
  - Therapy and case management are sometimes just as (or more) important
- Process of choosing medication options is collaborative
  - No “right” answer, weigh pros vs. cons, different for every patient and family

Case 1: Alexis

Alexis is a 13 year old girl who presents with mother.
Chief Compliant: Irritability, anger outbursts

History: Alexis reports periods of time when mood is worse (more sad and irritable). During these times she sleeps more, has decreased energy, more difficulty focusing at school, and doesn’t enjoy anything except for video games. Periods last 1-2 weeks.

Less frequently, Alexis reports short periods (lasting a day or 2) with much better mood, more energy, where she cleans her room “until it is spotless”, has really high self-esteem, much more social, can seem “all over the place” to mother and friends.

Case 1: Diagnosis

1. What is the most likely diagnosis?
   
   A. Persistent Depressive Disorder
   B. Major Depressive Disorder, recurrent, with mixed features
   C. Unspecified Bipolar Disorder
   D. Bipolar II Disorder
   E. Bipolar I Disorder

Case 1: Medication Options

She has never received any treatment...

2. What are her medication options?
   
   A. Lamotrigine (Lamictal)
   B. Atypical Antipsychotics (quetiapine (Seroquel), risperidone (Risperdal), aripiprazole (Abilify), lurasidone (Latuda))
   C. Lithium
   D. Valproate (Depakote)
   E. All of the above
**Pros and Cons of Medications**

<table>
<thead>
<tr>
<th>Medication</th>
<th>Pros</th>
<th>Cons</th>
<th>Blood Draw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamotrigine</td>
<td>Well tolerated</td>
<td>• Wash (rare, but can be severe)</td>
<td>NONE</td>
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<tr>
<td></td>
<td>Antidepressant depression</td>
<td>• Not effective for mania</td>
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<tr>
<td></td>
<td>• Not great for acute</td>
<td>• Data limited for youth</td>
<td></td>
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<tr>
<td></td>
<td>depression</td>
<td></td>
<td></td>
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<tr>
<td>Physical Antipsychotics</td>
<td>Good for mania</td>
<td>• Metabolic effects (weight gain)</td>
<td>Baseline + every 3-6 months</td>
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<tr>
<td></td>
<td>• Some good for depression</td>
<td>• Some motor side effects</td>
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</tr>
<tr>
<td></td>
<td>• Works very quickly</td>
<td>• Breast development/lactation (withdrawal)</td>
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<td></td>
<td></td>
<td>• Sedating (can increase, possible cognitive side effects)</td>
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<tr>
<td>Lithium</td>
<td>Gold standard for BD tx (maintenance + acute)</td>
<td>Kidney and thyroid side-effects</td>
<td>Baseline + 5 days after increase, then every 1-3 months</td>
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<tr>
<td></td>
<td>• Less weight gain than atypicals</td>
<td>Narrow therapeutic window (potential for toxicity; frequent monitoring, depakine can ↑ levels)</td>
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<td></td>
<td></td>
<td>• Cognitive side effects</td>
<td></td>
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<tr>
<td>Valproate</td>
<td>Treats mania</td>
<td>Not so effective for depression</td>
<td>Baseline + 1 week after increase, then every 3 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perhaps less effective in youth?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Birth defects, cognitive side effects</td>
<td></td>
</tr>
</tbody>
</table>

**6 months later…**
Depression is under good control, but now manic symptoms seem to be interfering with function. Unable to pay attention in class, “too much of a social butterfly”, and taking more risks (e.g. used substances) during these episodes.

3. Which options would you consider next?
A. Atypical Antipsychotics
B. Lithium
C. Valproate (Depakote)
D. A and B
E. All of the above

**Comorbidities: ADHD & Anxiety**
- May contribute to symptoms/poor functioning
- If mood is unstable, treat underlying mood disorder first

**ADHD**
- Many youth with BD will tolerate stimulants when mood is stabilized.
- ADHD can also contribute to irritability/anger

- If not sure whether sx are attributable to ADHD or mood disorder: trial of a stimulant is quick, often worthwhile

**Anxiety**
- Therapy is first line… but if symptoms are very impairing, many will tolerate SSRIs when mood is stabilized.
- Anxiety can also contribute to irritability/anger

**Case 1: Continued**
Through conversation with family, it seems that depressive periods are most problematic. Hypomanic episodes do not seem impairing. She is not currently depressed.

Weighing pros and cons, we (pt/family/MD) decide to start lamotrigine first:
- Slow titration
- Emphasize importance of not starting and stopping medication, esp. given risk of rash

**1 year later…**
- Alexis reports stable mood on lamotrigine and an atypical antipsychotic (quetiapine). However, other issues often arise…

**Case 2: Tim**
17 year old male who presents with his mom
- Reason for evaluation: “Nothing works for me”
- Initial Assessment: Tim reports that he is depressed most of the time. He reports periods of weeks to months with low mood, hopelessness, poor concentration, low energy, and suicidal ideation. He has attempted suicide twice.
- Tim also reports a 1 week period of elevated mood, increased energy, highly distracted, more talkative, and racing thoughts. During this time, he made plans to travel to California, but threw himself a going away party which was “busted” by the police. Parents were concerned about his erratic behavior, so he was evaluated and hospitalized.
Case 2: Diagnosis

4. What is the most likely diagnosis?
   A. Persistent Depressive Disorder
   B. Major Depressive Disorder, recurrent, with mixed features
   C. Unspecified Bipolar Disorder
   D. Bipolar II Disorder
   E. Bipolar I Disorder

Case 2: Psychiatric History & Current Medications

- 3 psychiatric hospitalizations
- 2 partial program admissions
- In-home therapy and outpatient therapy
- Past medications trials: fluoxetine (Prozac), escitalopram (Lexapro), sertraline (Zoloft), bupropion (Wellbutrin), quetiapine (Seroquel), risperidone (Risperdal), and aripiprazole (Abilify)
- Current medications: Lamotrigine (Lamictal) 100mg twice per day, Lurasidone (Latuda) 80mg daily

Case 2: Next Step

5. What would be the most appropriate next step before discussing medication options?
   A. Order genetic testing
   B. Collect additional medication history (duration of treatment, maximum dose, side effects and reason for discontinuation)
   C. Ask patient to complete mood charting for next 4 weeks
   D. Send patient for neuropsychiatric testing

6. What medication change would you recommend to treat his current depressive symptoms?
   A. Discontinue lurasidone (Latuda) and start olanzapine (Zyprexa)
   B. Add valproate (Depakote)
   C. Add lithium
   D. Add SSRI

Case 2: Lab Testing Prior To Starting Lithium

Tim and mom have agreed with our recommendation to start lithium.

7. Prior to starting lithium, all of the following lab tests should be ordered EXCEPT:
   A. Electrolytes, BUN, creatinine
   B. Urinalysis
   C. CBC
   D. Calcium
   E. Thyroid function tests
   F. Liver function tests (AST, ALT)

Case 2: What Now?

Tim’s depressive symptoms have resolved on lithium, lamotrigine (Lamictal), lurasidone (Latuda). His last lithium level was 1.0 mEq/L.

It’s 1PM on a Friday and you receive an urgent phone message from the lab. Tim had his blood drawn this morning and his lithium level is 1.8 mEq/L (in the toxic range.) You call his mom. She reports that he was “fine” this morning and went to school after getting his blood drawn.

8. What additional questions should you ask mom:
   A. Has your son been feeling more depressed?
   B. Are there fewer lithium tablets in his bottle than expected?
   C. When did your son take his last dose of lithium?
   D. Has your son started any new medications recently?
   E. All of the above
is this a must? many people are not doing it because it is difficult to interpret the results - suggest to lower the noise and consider it as an option

at some point remind the attendees to make only ONE change at the time. also, give time to meds to work (unless there is an emergency and two changes need to be made)
Case 2: Lithium Toxicity

Mom reports that Tim took his lithium 10-12 hours before his blood draw. She reports that his mood has been stable. She checks his lithium bottle and confirms that the appropriate number of tablets are remaining. Mom denies that he had any physical complaints this morning before leaving for school. She agrees to pick him up from school and bring him your office.

9. All of the following are signs and symptoms of lithium toxicity EXCEPT:
   A. Fever
   B. Nausea, vomiting, or abdominal pain
   C. Dizziness, clumsiness, coarse tremor or unsteady gait
   D. Confusion, slurred speech or blurred vision
   E. Hyperreflexia or clonus

Case 2: The Good News

Tim and mom present to your office at 3PM. Tim denies symptoms of depression and ingestion of more lithium than prescribed. He has no signs or symptoms of lithium toxicity. Although Tim and mom think you are “overreacting a bit,” they agree to go immediately to the hospital and have another blood draw. You send them with a requisition for a stat lithium level. You request that the lab call your mobile phone when the results are available.

At 6PM, the lab calls and reports Tim’s lithium level is 0.6 mEq/L. You call Tim and mom with the good news.

Take-Home Messages

• Irritability is a nonspecific symptom is distress.
• Bipolar Disorder is difficult to diagnose and differentiate from other conditions.
• Comprehensive assessment improves likelihood of correct diagnosis.
• The best approach to treatment of youth with bipolar disorder includes medication, therapy, and case management.
• Medication selection is a collaborative process.

Answers

False 5. B
1. C 6. C
2. E 7. F
3. D 8. E
4. E 9. A