Bipolar Disorder in Late Life

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Disclosures

My spouse worked as a researcher in the pharmaceutical industry until March of 2019. He was last employed by Novartis.
Who is in the audience?

Psychiatric Provider?

Primary Care Provider?

Other?
As the population ages . . .

The percent of bipolar patients who are over age 60 grows

Currently about 25% of patients with bipolar disorder are > 60 years old. By 2030 this will be 50%.

And . . .

Bipolar Disorder affects about 0.5 – 1.0 % of older adults (about 1/3 the rate for younger people).
Is it bipolar disorder?

Bipolar I Disorder

Bipolar II Disorder

The prevalence of misdiagnosis is high (48%-61%) in bipolar disorder. Misclassification decreases with age, but is still substantial.
What does mania look like in Old Age Bipolar Disorder (OABD)?

- Hyperactivity
- Aggression
- Insomnia
Differential Diagnosis of OABD

- Unipolar depressive disorder
- Schizoaffective disorder - bipolar type
- Schizophrenia
- Major neurocognitive disorder (dementia)
- Delirium
- Bipolar and related disorder due to another medical condition
- Substance/medication induced bipolar and related disorder
- Substance intoxication
# Medical causes of mania

<table>
<thead>
<tr>
<th>Neurologic</th>
<th>Toxic</th>
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<tbody>
<tr>
<td>• Dementia</td>
<td>• Medications</td>
</tr>
<tr>
<td>• Head injury</td>
<td>• Corticosteroids</td>
</tr>
<tr>
<td>• CNS tumor</td>
<td>• Amphetamines</td>
</tr>
<tr>
<td>• Multiple sclerosis</td>
<td>• Other sympathomimetics</td>
</tr>
<tr>
<td>• Stroke</td>
<td>• L-DOPA</td>
</tr>
<tr>
<td>• Epilepsy</td>
<td>• Other substances</td>
</tr>
<tr>
<td>• Wilson’s disease</td>
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<table>
<thead>
<tr>
<th>Infectious</th>
<th>Endocrine</th>
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<tbody>
<tr>
<td>• HIV</td>
<td>• Hypo- or hyperthyroidism</td>
</tr>
<tr>
<td>• Syphilis</td>
<td>• Hypercortisolemia</td>
</tr>
<tr>
<td>• Lyme disease</td>
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<tr>
<td>• Viral encephalitis</td>
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<tr>
<th>Sleep Apnea</th>
<th>Vitamin B12 Deficiency</th>
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Age of onset of bipolar disorder

Onset over age 50 is about 5 – 10% of individuals with bipolar disorder.

Behdin et al. 2016
Age at diagnosis – 2 different disorders???

Early Onset BD

New onset mania <50 years

Family history of affective disorder is common.

Late Onset BD

New-onset mania >50 years

Often associated with vascular changes or other brain pathology such as damage to right orbitofrontal or basotemporal areas.
Cognitive dysfunction in OABD

1. Cognitive Dysfunction found in > 30% of people with OABD.
2. Does BD cause neuroprogression/dementia? CONTROVERSIAL
3. Cognitive outcomes are worse in late onset than in early onset bipolar disorder.
4. Some neurodegenerative diseases (like Frontal-Temporal Dementia) have clinical overlap with OABD, leading to misdiagnosis.
5. What to do?
   1) Protect from CV risk factors.
   2) Avoid medications that worsen cognition (e.g. benzodiazepines and anticholinergic drugs).
Death occurs an average of 10 years earlier in bipolar patients than in the general population.

Cerebrovascular risk in OABD

Silent cerebral infarctions are present in over $\frac{1}{2}$ of patients with OABD.

Risk Factors

- Smoking
- Obesity
- Lack of Exercise
Treatment of OABD

Drug response in bipolar disorder is variable

• Not everyone responds in the same way to the same drug
• (What works for one person might not work for another)

Medical comorbidity can limit the treatment options for OABD because of

• Drug tolerability
• Drug-drug interactions
• Drug-disease interactions
• Altered metabolism
Variable Drug Response + ↑Medical Comorbidity = CHALLENGE!
Lithium

Effective for

- Bipolar Depression
- Bipolar Mania
- Bipolar Maintenance Treatment

Risks

- Renal dysfunction
- Hypothyroidism
- Narrow therapeutic window
Lithium and renal risk in OABD

Inadequate lithium monitoring

Increasing lithium levels

Worsening renal function

Co-prescription with

ACE inhibitors

Ca Channel Blockers

Diuretics

NSAIDs

Co-morbid

Diabetes

Hypertension

Age related renal decline
## Anti-epileptic drugs for OABD

### For acute mania
- Carbamazepine
- Valproate
- (Gabapentin)

### For bipolar maintenance treatment
- Lamotrigine
- Valproate

### For bipolar depression
- AED’s not recommended
Valproate in OABD

Drug-drug interactions

- Aspirin
- Warfarin
- Digitoxin
- Phenytoin
- Lamotrigine – valproate decreases clearance

Ammonia levels can become elevated, even with normal valproate levels.
## Atypical antipsychotics

### For acute mania
- Olanzapine
- Quetiapine
- Aripiprazole
- Risperidone
- Ziprasidone
- Asenapine
- Cariprazine
- (Clozapine – not FDA approved)

### For bipolar maintenance treatment
- Aripiprazole
- Olanzapine
- Risperidone
- Quetiapine
- Ziprasidone

### For bipolar depression
- Olanzapine + fluoxetine
- Quetiapine
- Lurasidone
Atypical antipsychotic challenges in OABD

Many carry ↑ risk for metabolic syndrome.

Some carry risk of extrapyramidal or Parkinson-like effects.
Electroconvulsive Therapy (ECT)

Can be an excellent option for OABD
Psychosocial interventions

Helping Older People Experience Success (HOPES)
- Skills training and health management training
- Improved social skills
- Community functioning
- Self-efficacy
- Leisure
- Recreation

Medication adherence skills training (MAST-BD)
- Improved medication adherence
- Depression
- Quality of life indices

References
