# **Bipolar Disorder**

# **Background**

- 1. Definition
  - Mood disorder defined by 1 or more episodes of mood elevation
    - Often characterized by frequent depressive Sx
  - o Bipolar I Disorder
    - Episodes of sustained mania often with depressive episodes
  - o Bipolar II Disorder
    - At least 1 major depressive episode and at least 1 hypomanic episode

#### 2. General info

- May initially present with depression in primary care setting; many are misdiagnosed
- Prognosis for BD is worse, and tx is different than that for unipolar depression
- Pts who present with depression should be asked specific questions to assess hx of mania or hypomania
- o Pts with BD more likely to have a family hx of BD and earlier onset

# **Pathophysiology**

- 1. Pathology of disease
  - o No dominant theory, although a genetic basis has been explored
  - Most studies have looked at neurotransmitter systems targeted by most effective therapeutic drugs
  - Some evidence for involvement of tryptophan hydroxylase 2 (TPH2) gene, which codes for rate limiting enzyme in synthesis of serotonin
- 2. Incidence/prevalence
  - Lifetime prevalence in United States 1-2.1%
    - True prevalence uncertain
      - Many BD pts may be undiagnosed or misdiagnosed with depression
  - Age of onset generally before 25 yrs
  - o Bipolar I affects men and women equally
  - Bipolar II more common in women
- 3. Risk factors
  - 2 most important risk factors
    - Genetics/family hx
    - Personal hx
  - Studies of families have shown:
    - 40-70% lifetime risk for a monozygotic twin
    - 5-10% for a 1st degree relative
    - 0.5-1.5% for an unrelated individual
  - Another study showed that pts hospitalized for depression are at higher lifetime risk for BD
- 4. Morbidity/mortality
  - o 25-50% of BD pts attempt suicide at least once
  - o 15% actually commit suicide which is higher than rate for pts with depression and 30x rate in general population
  - o 90% of pts with one manic episode will have future episodes

- 90% of BD pts will have at least 1 psychiatric hospitalization and two-thirds have 2 or more in their lifetime
- High rates of alcohol and substance abuse and anxiety disorder among BD pts contribute to morbidity

# **Diagnostics**

- 1. History
  - Majority of BD pts will present with depression
  - 1st manic episode usually occurs 6-8 yrs after 1st depressive episode and may be brought on by stressful events
  - Symptoms of mania:
    - Elevated mood (or markedly irritable)
    - Inflated self esteem or grandiosity
    - Flight of ideas/racing thoughts
    - Rapid pressured speech
    - Increase in goal directed activity or psychomotor agitation
    - Decreased need for sleep
    - Mood congruent delusions
    - Distractibility
    - High risk behavior
      - Spending sprees, gambling, promiscuity

#### o **DIGFAST**

- Mnemonic representing Sx of manic episode:
  - Distractible
  - Irritable
  - Grandiose
  - Flight of ideas
  - Activity (incr)
  - Sleep (decr need)
  - Talkative
- May present with psychotic features making dx difficult
- o Primary symptoms, unlike those of schizophrenia, include disturbances in:
  - Sleep
  - Appetite
  - Activity level

### Signs of mania:

- Flamboyant dress
- Socially inappropriate behavior
  - Grabbing others, masturbating
- Flirtatious
- Hyper-religious
- Litigious
- o Other pertinent areas of hx
  - Personal hx of depression or substance abuse
  - Family hx of BD
  - Social hx indicating any of the above signs

## 2. Physical

 Findings include any of above signs as well as assaultive or threatening behavior

## 3. Diagnostic testing

- Functioning Assessment Short Test (FAST)
  - Short interview that scores impairment or disability and is useful for distinguishing euthymic pts from acute BD pts
- Mood Disorder Questionnaire (MDQ)
  - 73% sensitivity, 90% specificity for BD with screening score >7, using structured clinical interviews for DSM-IV as reference standard
- o No useful screening test for BD in children
  - Refer to child psychiatrist
- o Full work-up should include:
  - TSH
  - CBC
  - Chemistries
  - Urine toxicities for substance abuse
- Children
  - No well-validated screening instrument for dx of bipolar disorder in children exists
  - Kiddie Schedule for Affective Disorders and Schizophrenia (KSADS) with clinical evaluation by a childhood mental health specialist is used most often in major research studies

## 4. Diagnostic criteria

- American Psychiatric Association
  - Defines episode of mania as a distinct period of abnormally elevated, expansive, or irritable mood lasting at least 1 wk (or any length if hospitalization is necessary) with ≥3 of the following:
    - Inflated self esteem or grandiosity
    - Decreased need for sleep
    - More talkative than usual
    - · Racing thoughts or flight of ideas
    - Distractibility
    - Increase in goal directed activity
    - Excessive involvement in pleasurable activities that may have painful consequences such as spending money or sexual indiscretion
- Hypomania
  - Defined by briefer duration (>4 days) of less severe manic Sx
  - Does not include psychotic Sx or require hospitalization
  - May result in improved functioning

### **Differential Diagnosis**

- 1. Drug induced
  - Antidepressants
  - Glucocorticoids
  - o ACTH
  - L-Dopa
  - o INH

- o PCP
- Psychostimulants
- o Cyclobenzaprine (Flexeril)
- 2. Endocrinologic
  - o Hyperthyroidism
  - o Cushing's
  - Addison's
- 3. Neurological disorders
  - o MS
  - o Wilson's dz
  - o Huntington's dz
  - o Temporal lobe lesions
- 4. Other psychiatric disorders
  - Personality disorders
  - Schizophrenic disorders
  - o PTSD
- 5. Consider toxicity 2° to mood stabilizing meds
  - o Lithium, Depakote, Tegretol
- 6. Assess for ETOH, drug withdrawal / intoxication:
  - o Cocaine, PCP, speed, hallucinogens
- 7. Consider dx that mimic, cause or exacerbate mood disorders:
  - Hyperthyroidism
  - o Delirium
  - o CNS infection
  - o SLE
  - o CVA
  - o HIV
  - o 3° syphilis

## **Therapeutics**

- 1. Acute treatment
  - Mood stabilizers
    - Lithium
    - Valproate
    - Carbamazepine
  - o Antipsychotics may also be used alone or with a mood stabilizer:
    - Olanzapine
    - Risperidone
    - Quetiapine
  - Benzodiazepines
    - May also be used in addition to mood stabilizers
  - Also consider anticonvulsants, psychotherapy, ECT, and referral to a psychiatrist / psychologist
- 2. Further management (24 hrs)
  - Mania: maintenance Tx
    - Antipsychotic with lithium or valproate to reduce recurrence of manic episodes
    - Pregnancy

- Lithium 1st line treatment
- Monotherapy preferred for women of childbearing age
- Depression: maintenance Tx
  - Lithium
  - Lamotrigine
    - Beneficial for both acute treatment of bipolar depression and prevention of recurrent episodes
- For patients who do not respond to 1st line Tx, consider adding a 2nd mood stabilizer or atypical antipsychotic
- o Critical complications include:
  - Signs and symptoms of a hypomanic / manic episode often signaled by decrease in sleep

# 3. Long-term care

- Lifelong Tx for pts who experience 1 severe manic episode to 3 or more manic episodes
- Treatment of choice:
  - Mood stabilizers, esplithium which is effective against depression and when administered long-term has been shown to reduce risk of suicide based on a systematic review of randomized trials
- Fully integrated care includes psychotherapy and Tx of substance abuse and anxiety disorders

## Follow-Up

- 1. Return to office
  - Time to follow-up is based on clinician's judgment, new Tx prescribed, and severity of Sx
  - For pts initiating lithium, labs should be checked in 5 days to assess steady state level and regularly monitored thereafter
  - Pregnancy
    - When prescribing lithium or anticonvulsants (valproic acid, carbamazepine), draw blood levels monthly during 1st and 2nd trimesters, and then weekly in 3rd trimester
- 2. Refer to specialist
  - Psychiatrist / psychologist consult based on severity of Sx, provider comfort with condition, and response to standard Tx
- 3. Admit to hospital
  - Consider hospitalization
    - Pts who pose a danger to themselves or others
    - Pts who are unable to care for themselves
    - Pts with elevated mood stabilizing drug levels
    - Pts with concurrent medical problems
    - Pts with multiple recent visits to ED
  - o Be cautious & reluctant to discontinue manic pts, esp if 1st episode
  - o Do NOT let unstable manic pts sign out AMA, admit involuntarily
  - If pt judged able to comply without patient care, discharge with follow up may be practical and safe

 If pt stable for discharge, in outpatient tx & has become noncompliant with meds, offer same medication with several days' worth to discharge and follow up with outpatient psychiatric care

# **Prognosis**

- 1. Even with remission, most pts who have 1 episode of mania will have recurrences
- 2. Significant suicide risk
  - o Hospitalization is often required
- 3. Most pts can expect lifelong pharmacotherapy to reduce occurrence of mania / depression and reduce risk of suicide

### References

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### **Evidence-Based Inquiry**

- 1. What's the best strategy for bipolar disorder during pregnancy?
- 2. Which tool is most useful in diagnosing bipolar disorder in children?
- 3. What drugs are best for bipolar depression?

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