DEPRESSION IN ADOLESCENCE: ASSESSMENT AND MANAGEMENT

BRIAN SMITH MD
MICHIGAN STATE UNIVERSITY
DEPARTMENT OF PSYCHIATRY

OBJECTIVES

- Recognize differences in presentation between adolescents and adults
- Differentiate between depression and other mental health conditions in adolescents
- Discuss screening for adolescent depression including scales
- Describe treatments for adolescent depression including psychotherapy, pharmacotherapy, and combination treatment
HOW DOES IT PRESENT DIFFERENTLY IN ADOLESCENTS?

- **Irritability** (may substitute for depressed mood criterion)
- Somatic symptoms
  - Especially headaches and stomachaches
- Behavior problems
- Pervasive boredom
- Failure to reach expected weight gain
- Decreased school performance
- Less hypersomnia/decreased energy
EPIDEMIOLOGY

• Prevalence
  • 6% of adolescents (compared to 2% of children)
  • Lifetime prevalence by late adolescence of up to 25%
  • Equal M:F in children but 1:2 after puberty

GENETICS

• 40-60% heritability
• Maternal depression strongly influences
• May recommend that parents receive own care
• Suicide also runs in families
SUICIDE

- 3rd leading cause of death ages 10-14
- 2nd leading cause of death ages 15-24
- Depression leading risk factor for suicidal ideations and attempts
  - 1 in 3 adolescents with depression attempt suicide (12x normal risk)
- Firearms greatest risk for suicide completion in depressed youth

DIFFERENTIAL DIAGNOSIS

- Bipolar Disorder
- Adjustment Disorder (sometimes a chronic course)
- Anxiety
- PTSD/RAD
- Eating Disorder
- Substance Use Disorder
- Borderline Personality Disorder
- Medical: hypothyroidism, anemia, seizures, etc.
BIPOLAR DISORDER

- 20-40% of youth with depression later develop bipolar
- Increased risk of development of bipolar
  - Manic-like response to antidepressant
  - Family history of mood disorders
  - Psychosis
- Bipolar mania and schizophrenia often do not present until late adolescence/early adulthood

SUBSTANCE USE DISORDER: CANNABIS

- Cannabis use disorder linked to worsening depression and suicidality
- Depression is most common psychiatric diagnosis with cannabis use in adolescence
- Improved depression with reduced cannabis use
SCREENING

- 2/3 of cases of depression in youth undiagnosed and untreated
- American Academy of Pediatrics (AAP) recommends universal screening in children 12 years and older
- Primarily accomplished through clinical interview although now recommend at least one formal self-report scale

SCALES

- Patient Health Questionnaire-9 (PHQ-9)
  - Appropriate for ages 12 and up
- Children’s Depression Inventory (CDI)
  - Ages 7 to 17
- Beck Depression Inventory-II (BDI-II)
  - Ages 13 and up
ADDITIONAL THINGS TO CONSIDER

- Environmental influence is big!
  - Especially social including bullying and excessive social media
  - Home environment
  - School performance
- Youth often more aware of internal state than parents
- Speak alone with adolescent when possible
- Teens often look quite different outside of the clinic or with their friends
- Other risk factors: LGBT, trauma, medical illness, and self-injury
- May order TSH, CBC, etc.

COGNITIVE BEHAVIORAL THERAPY (CBT)

- Strong evidence for effectiveness of CBT in adolescents (13+)
  - Also evidence for Interpersonal Psychotherapy (IPT)
- Reasonable first choice for mild to moderate depression in adolescents
- But therapy not a good fit for everyone
FDA-APPROVED ANTIDEPRESSANTS

• Selective Serotonin Receptor Inhibitors (SSRIs)
  • Fluoxetine (Prozac)
    • Ages 8-18
    • 10-40 mg (max 80 mg)
    • Only antidepressant to consistently outperform placebo
  • Escitalopram (Lexapro)
    • Ages 12-17
    • 10-20 mg (max 40 mg)

OTHER ANTIDEPRESSANT MEDICATIONS

• Tricyclic antidepressants (TCAs) no better than placebo
  • High placebo response rates for children (30-60%)
• Citalopram (20-40 mg), sertraline (50-200 mg), and paroxetine (20-40 mg)
• Also buproprion, venlafaxine, and duloxetine
  • Little studied and often no better than placebo
SSRI TREATMENT

• Similar dosages to adults although may begin at half for children
• May dose twice daily
• Trial for 6-8 weeks at therapeutic dosage
• 2 out of 3 respond to SSRIs but only 30-40% full remission
• Number Needed to Treat (NNT) is 9 overall, 4 for fluoxetine
  • Pediatric anxiety has NNT of 3
• Monitor closely for treatment adherence

SSRI TREATMENT

• Most common side effects are gastrointestinal, especially nausea
  • Also sleep disturbance, headache, and sexual side effects
• SNRIs and paroxetine may be more poorly tolerated
• 6x more teenagers benefit from antidepressant than harmed
• Continue 6 - 12 months after remission
• Maintenance after 2 episodes
  • 70% incidence by year 5 after first episode
BLACK BOX WARNING FOR SSRI

- Spontaneous self harm and suicidal thoughts
- 2% increased risk overall (2% placebo vs. 4% SSRI)
  - Possibly greater with paroxetine or venlafaxine
- However, 14x greater number respond positively to treatment
- After prescribing dipped after black box, suicide rate increased

COMBINATION TREATMENT

- Treatment of Adolescent Depression Study (TADS)
  - Combination CBT and fluoxetine better than fluoxetine alone
  - Fluoxetine outperformed CBT
- Treatment of SSRI-Resistant Depression in Adolescents (TORDIA)
  - If no response to 8-week SSRI trial, combination therapy best for next step (CBT plus new SSRI—citalopram, fluoxetine, or paroxetine—or venlafaxine)
  - Electroconvulsive Therapy (ECT) also option for treatment resistant
NEW DEVELOPMENTS

- Ketamine
  - Treatment-resistant depression
    - Case-reports and open-label trials in adolescents
- Folate supplementation
- Exercise
  - Evidence for mild benefits

GUIDELINES FOR ADOLESCENT DEPRESSION IN PRIMARY CARE (GLAD-PC)

- 1) Screen for depression in adolescents
- 2) Actively monitor mild depression
- 3) Treat mild depression if persistent/treat moderate or greater severity depression with medication and/or therapy (CBT or IPT-A)
- 4) PCP should consider consulting or comanaging with mental health specialist when no improvement after 6-8 weeks of care, moderate or greater severity, or complicated (substance use, psychosis, etc.)
QUICK CASE #1

• 16-year-old girl
• Endorses feeling “depressed my whole life” with sadness, emptiness, feelings of worthlessness, and suicidal thoughts (none current)
• Engages in cutting to “calm down”
• Frequent anger and intense arguments with mother and patient’s boyfriend
• Failed trials of fluoxetine and escitalopram

CASE #1

• What is the most likely diagnosis?
• Which intervention/interventions are most likely to be effective?
QUICK CASE #2

• 9-year-old boy
• 10 days after starting fluoxetine 5 mg for depression and anxiety presents to clinic with 5-day history of mood and behavioral change
  • Increased energy
  • More irritable and restless
  • Outspoken and silly
  • Difficulty falling asleep at night and not tired next day

CASE #2

• What is the most likely diagnosis to explain the current presentation?
• Which intervention/interventions are most appropriate?
QUICK CASE #3

• 15-year-old girl

• Taking sertraline 200 mg for the past 2 months for depression

• Partial response to the sertraline but continuing to experience initial insomnia, mild anhedonia, low motivation, and decreased appetite (BMI 30th percentile)

• Prior trial of fluoxetine of uncertain benefit at 20 mg for 3 months

• History of skin picking and binge-purge behaviors

CASE #3

• Which intervention/interventions might be appropriate for this situation?

• Which intervention/interventions might not be appropriate?
SUMMARY

• Depression is underdiagnosed and undertreated in adolescents
• Depression may present differently in teens than adults
• Universal screening is recommended for age 12 and older
• Cognitive behavioral therapy (CBT) and/or SSRI may be first-line treatment for depression in adolescents
• Fluoxetine is the most effective antidepressant for adolescent depression
• Combination treatment (CBT and medication) is likely superior to therapy or medication alone

REFERENCES

• Clinical Manual of Child and Adolescent Psychopharmacology, 3rd edition
• Dulcan's Textbook of Child and Adolescent Psychiatry, 2nd edition
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