3:45 – 4:45 pm

Managing Depression and Anxiety in the Adolescent

SPEAKER
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Presenter Disclosure Information

The following relationships exist related to this presentation:

- Rachel Ballard, MD: No financial relationships to disclose.

Off-Label/Investigational Discussion

- In accordance with pmiCME policy, faculty have been asked to disclose discussion of unlabeled or unapproved use(s) of drugs or devices during the course of their presentations.

Assessment and Management of Depression and Anxiety in Adolescents

Rachel Ballard, MD

Case

- It is 4 o'clock on a busy Friday afternoon. You check the chart of your next patient before entering the room. Margaret is 14, and you have seen her twice before- late last summer for a sports physical, and once over the winter for a sore throat. She has no chronic illnesses. Your MA has gotten vitals and documented "behavior changes" as the chief complaint.

- You enter the room and greet Margaret and her mother, Ms B. Margaret gives you a lukewarm greeting with poor eye contact. She is wearing a long sleeve shirt with shorts. She sits quietly while Ms B describes behavioral changes: increasingly isolated, staying in her room after school, rarely interacting with family, and a drop in grades.

- Ms B is worried that Margaret is depressed, but Margaret won't talk much about anything. There is a family history- dad has a history of depression, and dad's brother has attempted suicide. Mom's mother has anxiety.
- You observe Margaret as her mother talks. She sits sideways in the chair, facing the corner, eyes down.
- What next?

What are your next steps?

- A. Tell mother and Margaret you would like to refer her for therapy.
- B. Ask mother to leave room. Suggest to Margaret that it looks like she has been feeling kind of bad lately.
- C. Say you wonder if she has been hurting herself, and ask her to show you her arms.
- D. Tell Margaret she will feel better if she gets enough sleep and exercise.
- E. Both B & C

The Depressive Disorders

Major Depressive Disorder

- At least 2 weeks of persistent depressed mood (or irritable mood in children) and/or decreased interest or pleasure in activities
- And 4 of the following (or 3, if both of the above are present:

MDD, cont

- Significant change in weight or appetite
- Insomnia or hypersomnia nearly every day
- Observable psychomotor retardation or agitation
- Fatigue or loss of energy
- Feeling worthless or excessive guilt
- Decreased concentration/indeciciveness
- Recurrent thoughts of death/SI

Persistent Depressive Disorder (Dysthmia)

- Depressed mood most of the day, more days than not, for 2 years (1 year in children), with no more than 2 months of euthymia
- With 2+ of these:
  - Poor appetite or overeating
  - Insomnia or hypersomnia
  - Low energy or fatigue
  - Low self-esteem
  - Poor concentration/indeciciveness
  - Feelings of hopelessness

Disruptive Mood Dysregulation Disorder (New!)

A. Severe recurrent temper outbursts manifested verbally and/or behaviorally that are grossly out of proportion in intensity or duration to the situation or provocation.
B. The temper outbursts are inconsistent with developmental level.
C. They occur on average 3+ times weekly.
D. Mood between outbursts is persistently irritable or angry most of the day, nearly every day, as observed by others.

DMDD

E. Criteria A-D present for 12 months, with no 3 month period without all symptoms
F. Criteria A and D present in at least 2 settings, and be severe in at least 1
G. Diagnosis should not occur before age 6 or after age 18
H. Age of onset of Criteria A-E is before age 10

DMDD

- What is it?
- Where did it come from?
- Where does it go after age 18?
- How is it related to pediatric Bipolar Disorder?

The Anxiety Disorders: Overview

Separation Anxiety: case

- Millie is an 8 year old girl presenting for her well child visit. When asked about sleep, mother reports that Millie will not sleep unless a parent is in the room. In addition, Millie follows her mother around the house: she cannot be in a room by herself, and follows mom into the bathroom. If mother leaves her with grandmother while mother runs errands, Millie will want to call several times an hour to check on her. She attends school but frequently visits the nurse's office with stomachaches, saying she needs to go home. She becomes extremely upset if mother is a few minutes late picking her up. Recently, in social studies class, she learned that Cesar Chavez "died in his sleep," and since then asks every night before bed if mom will die that night.

Separation Anxiety – DSM-V

- Developmentally inappropriate and excessive fear concerning separation from those to whom the individual is attached, as evidenced by at least 3 of the following (for at least 4 weeks in children):
- 1. recurrent excessive distress when anticipating or experiencing separation from home or from major attachment figures.
- 2. persistent and excessive worry about losing major attachment figures or about possible harm to them, such as illness, disaster or death.
- 3. persistent and excessive worry about experiencing an toward event that causes separation

Separation anxiety criteria, cont.

- 4. persistent reluctance to go out, away from home, to school, etc because of fear of separation.
- 5. persistent and excessive fear of reluctance about being alone or without major attachment figures at home or other settings.
- 6. persistent reluctance to sleep away from home or without attachment figure nearby.
- 7. repeated nightmares involving theme of separation.
- 8. repeated complaints of physical symptoms when separation from attachment figures occurs or is anticipated.

Separation Anxiety Disorder

- Prevalence in children is 4%, and in adolescents 1.6%. Decreases through childhood, but can persist into adulthood.
- Often develops after a life stress, particularly a loss or separation.
- In young children, the fears may be vague, and in older children more specific (kidnapping, etc).
- Often results in limitations on activities, including school, visiting friends, extracurricular activities.

Generalized Anxiety Disorder- case

- Emily is a 13 year girl who presents with frequent headaches and dizzy spells. These have gotten worse as she approaches the high school entrance exams. Emily worries about how she will do on the tests, and she worries about her homework, and generally assumes that if she does poorly she will fail out of school and her parents will be disappointed in her. She worries about her health symptoms, and worries that she has offended others by little things she says. She is increasingly irritable and tense, and sleeps poorly.

Generalized Anxiety Disorder: DSM-V

- A. Excessive anxiety and worry, occurring more days than not for at least 6 months, about a number of events or activities (such as school or work performance.
- B. The individual finds it difficult to control the worry.
- C. The anxiety is associated with 3+ of the following, present more days than not for 6 months:
  - 1. restlessness/feeling keyed up/on edge
  - 2. being easily fatigued
  - 3. difficulty concentrating/mind going blank
  - 4. irritability
  - 5. muscle tension
  - 6. sleep disturbance

  Only 1 of these 6 is required in children.

Generalized Anxiety Disorder

- GAD is distinguished from "normal" worrying in that the worries are more pervasive, persistent, and interfere with function.
- Median age of onset is 30 years; rare in children, 0.9% prevalence in adolescence. Female:male ratio 2:1.
- Commonly associated with somatic symptoms (sweating, nausea, diarrhea) and syndromes (IBS, headaches.)

Social Phobia- case

- Mark is a 15 year old boy with recurrent abdominal pain, nausea, vomiting and diarrhea who recently had a normal colonoscopy and diagnosis of IBD. He has always been anxious, but since his GI symptoms developed, he is increasingly anxious about being at school. He worries that symptoms will develop there, but also worries about what others think of him. He is unable to ask questions in class, or answer them, or give presentations. He fears his classmates judge him negatively. He will not initiate social interactions. If he misses school due to GI symptoms or a doctor's appt, it is very hard to return the next day as he worries that everybody is looking at him when he comes back.

Social Phobia: DSM-V

- A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others.
- B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (ie, will be humiliating or embarrassing; will lead to rejection or will offend others.)
- C. The social situation almost always provokes fear or anxiety.

Social Phobia, cont

- D. The social situations are avoided or endured with intense fear or anxiety.
- E. The fear or anxiety is out of proportion to the actual threat posed by the social situation and the sociocultural context.
- The fear, anxiety or avoidance is persistent (6 + months)
- The fear, anxiety, or avoidance interferes with function and/or causes significant distress.

Social Phobia, demographics and course

- Prevalence of 7% in US, lower in other countries.
- Median age of onset 13 years, 75% have onset between 8 and 15 years.
- Highly associated with school dropout and decreased well being, employment, productivity, and quality of life.

Panic Disorder/Agoraphobia-case

- Sarah is 16 year old girl with a history of asthma who presents to her pediatrician for follow up on an ED visit 10 days ago. She had gone to the ED with sudden onset of shortness of breath, palpitations, sweating, tingling in her hands, and the feeling that she was going to die. On arrival to the ED, her vitals were normal.

Panic Disorder: DSM-V

- A. Recurrent, unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time 4+ of the following occur:
- 1. palpitations
- 2. sweating
- 3. trembling or shaking
- 4. sensations of shortness of breath or smothering.
- 5. feelings of choking.
- 6. chest pain or discomfort
- 7. nausea or abdominal distress

Panic Disorder, cont.

- 8. feeling dizzy, light-headed or faint.
- 9. chills or heat sensations.
- 10. paresthesias
- 11. derealization or depersonalization
- 12. feeling of losing control or "going crazy"
- 13. fear of dying.

B. At least 1 of the attacks has been followed by 1 month + of 1 or both:

1. persistent concern or worry about additional panic attacks or their consequences (losing control, heart attack)

2. A significant maladaptive change in behavior related to the attacks (avoidance of situations)

Panic Disorder, demographics and course

- Prevalence 2-3% in adolescents and adults.
- Rare in children. Median age of onset 20-24 years.
- Female:male ratio 2:1.
- Respiratory problems, including asthma, are more common in panic disorder.
- Smoking is a risk factor for panic attacks/disorder.

Specific Phobias

- Marked fear or anxiety about a specific object or situation. In children, may be expressed by crying, tantrums, freezing or clinging.
- Phobic object almost always provokes immediate fear or anxiety.
- Phobic object is actively avoided or endured with intense fear or anxiety.
- Fear/anxiety out of proportion to the actual danger posed.

Specific Phobia: types

- Animal
- Natural environment (heights, storms, water)
- Blood-injection-injury
- Situational (airplanes, elevators)
- Other (choking/vomiting, clowns, etc)
- ********
- Prevalence rate 5% children, 16% teens

Obsessive Compulsive Disorder

- DSM-V moved OCD to its own category, along with Body Dysmorphic Disorder, Trichotillomania, Hoarding Disorder, and Skin-Picking Disorder.
- Presence of obsessions, compulsions, or both, causing significant distress or taking up significant amount of time.
- CBT is best initial treatment.

PTSD: diagnosis

- A. exposure to a traumatic stressor
- B. Intrusive thoughts/nightmares/flashbacks
- C. Persistent avoidance of trauma related stimuli
- D. Negative alterations in cognition or mood
- E. Alterations in arousal and reactivity
- F. For more than a month
- G. impairment or significant distress
- May be accompanied by dissociative symptoms
- Modified criteria for children under 6
- Bottom line: these children should be referred for therapy.

Anxiety and Depression are common.

- Prevalence rates among children younger than 18 year old are estimated between 5.7 and 12.8%.
- Anxiety disorders often co-occur.
- They tend to have a chronic course, manifesting differently through childhood.

Anxiety often shows up as physical complaints.

- The diagnostic criteria for several anxiety disorders include somatic symptoms.
- Somatic symptoms can include chest pain, tachycardia, dizziness, shortness of breath, nausea, vomiting, and abdominal pain.
- In children with recurrent abdominal pain, up to 43% may have a depressive disorder and up to 79% may have an anxiety disorder.

Anxiety comes along with somatic conditions:

- Common medical conditions in children with anxiety include: migraine, gastrointestinal disorders, asthma and other atopic conditions.
- These are likely bidirectional relationships, with the anxiety disorder magnifying the symptoms of the medical condition, and the symptoms of the medical condition triggering anxiety.

Anxiety and depression are often not alone.

- Anxiety disorders co-occur with each other, and with mood disorders, ADHD, and substance use disorders.
- Certain recently popular substances, such as “incense” and “bath salts” as well energy drinks can present with anxiety reactions that last much longer than predicted by the substance’s duration in the body.

Anxiety and ADHD

- These 2 can be very difficult to tell apart. Both can present as inattention, fidgetiness, restlessness, and poor school performance.
- They can also both be present, causing significant symptom overlap.
- ADHD medications may make anxiety worse, but not always.

Anxiety and School Attendance

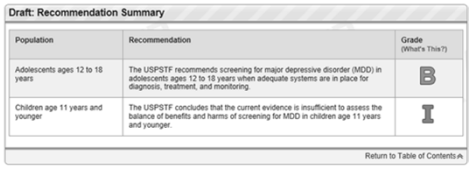
- School refusal is a common presentation to the pediatrician’s office.
- Differential is broad, and can include bullying, undiagnosed learning disabilities, but anxiety disorders are common.
- In younger children, separation anxiety is more common, and in teens, social phobia.

Assessment in the office

- Barriers:
- - worry about stigma, or the suggestion that somatic symptoms may be “in your head”.
- Need/perceived need to run tests to rule out other disorders
- Time
- Parental anxiety often goes with child’s anxiety

U.S. Preventive Services TASK FORCE

- September, 2015



Draft: Recommendation Summary

Population	Recommendation	Grade (What's This?)
Adolescents ages 12 to 18 years	The USPSTF recommends screening for major depressive disorder (MDD) in adolescents ages 12 to 18 years when adequate systems are in place for diagnosis, treatment, and monitoring.	B
Children age 11 years and younger	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for MDD in children age 11 years and younger.	I

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Screening- Depression

Instrument	Age range	Parent/child	# questions	proprietary
PHQ	13+	child	2 or 9	no
MFQ	8-18	both	11 or 33	No (available at Duke Univ)
Beck Depression	Youth- 7-12 BDI II- 13+	child	20-21	yes
CDI	7-17	both	27	yes

A Guide: the GLAD-PC Toolkit

- Developed in conjunction with the 2 part AAP Guideline for Adolescent Depression in Primary Care (GLAD-PC)
- Contains key elements from the guidelines
- Screening instruments
- DSM-IV guidelines for diagnosis
- Information on medication and therapy

GLAD-PC toolkit

- Available online as a PDF document at
  - thereachinstitute.org

Screening - SCARED

- Comes in a long form, which has 41 items in a child and parent version.
- Subscales measure Panic Disorder, Social Phobia, Separation Anxiety, Generalized Anxiety, and school refusal.
- A shortened, 5 item form uses the one item from each of the five factors with the highest loading in a discriminant function analysis.
- The 5-item SCARED is reported to have similar psychometric properties as the original scale.
- Likert scale 0 = Not true/hardly ever true, 1= somewhat/sometimes true, 2= very/often true
- Scores >= 3 differentiate children with anxiety disorders from children with no anxiety disorders

SCARED-5

Child version

- I am shy.
- People tell me that I worry too much.
- I am scared to go to school.
- I get really frightened for no reason at all.
- I am afraid to be alone in the house.

Parent version

- My child is shy.
- People tell me that my child worries too much.
- My child is scared to go school.
- My child gets really frightened for no reason at all.
- My child is afraid to be alone in the house.

The SCARED is in the public domain.

http://www2.massgeneral.org/schoolpsychiatry/screeningtools_table.asp

Most important in assessment:

- Clinical assessment

Rapport

- 1. Be yourself
- 2. Acknowledge pain, and reticence
  - "I know this stuff is hard to talk about, but it looks like you are feeling pretty bad."
- 3. Normalize
  - "These kinds of feelings happen to a lot of people, and they are not easy to deal with."
- 4. Give hope
  - "I have found that a lot of kids get past depression/anxiety once they can talk about it and get some help with it."

Safety assessment

- Do this early on, after an initial period of listening.
- Screen for
  - Hopelessness
  - Suicidal thoughts: passive and active
  - Non-suicidal self injury
  - Thoughts of hurting others
  - Hallucinations, especially command auditory

Safety plan

1. Make home safe: secure or remove guns, knives, drugs, poisons.
2. Ask about suicidal thoughts.
3. Monitor for behavior indicating suicidal thoughts, including drawing, listening to music, reading books, playing games, etc with themes of death. Also giving away possessions.
4. Make a plan- who to call, where to go.

SAD PERSONS – high risk teens

- **S**ex- (more females attempt, males commit)
- **A**ge – greater than 16
- **D**epression (and comorbid conduct disorder, impulsivity or aggression).
- **P**revious attempts
- **E**thanol or substance abuse
- **R**ational thinking lost (psychosis)
- **S**ocial supports lacking
- **O**rganized plan
- **N**o significant other
- **S**ickness/Stressors
- **+ suicide in a first degree relative**

Back to Assessment

- If you have done your safety assessment and don't have immediate concerns, assess motivation for treatment
- Parent and teen may have different concerns and different goals for treatment, if any
- Discuss confidentiality when you talk with teen alone

Studies you should know- Depression

- TADS: Treatment for Adolescents with Depression Study
- Funded by NIMH in 1999
- Randomized placebo-controlled trial to evaluate effectiveness and durability of 4 treatment arms
- 439 adolescents with CDRS score >= 45, broadly representative of clinical samples

TADS, continued

- 3 stages
  - Acute: 12 weeks
  - Longer duration: 36 weeks
  - Durability: 1 yr naturalistic f/u after completion of tx
- 4 arms:
  - Fluoxetine alone
  - Fluoxetine plus CBT
  - CBT alone
  - placebo

	Number of patients:	Stage 1 (6 wk): No and % of suicidal events*	Stage 1-3 (to 36 wk):No and % of suicidal events*
COMB	107	5 (4.7)	9 (8.4)
FLX	109	12 (11.0)	16 (14.7)
CBT	111	5 (4.5)	7 (6.3)
Total	327	22 (6.7)	32 (9.8)

TADS: safety

* Suicidal events include suicide attempts, preparatory action toward suicidal behavior, or suicidal ideation. There were no suicides.

March et al 2007. Arch Gen Psych

Studies you should know

- TORDIA: Treatment of SSRI-Resistant Depression in Adolescents
- Randomized trial of 334 adolescents with DSM-IV defined MDD initially resistant to SSRI treatment subsequently treated w 12 wks of:
  - Another SSRI
  - Venlafaxine
  - Another SSRI + CBT
  - Venlafaxine + CBT

TORDIA results

- About 55 % of those who switched to Med + CBT responded, while 41 % of those who switched to another medication alone responded.
- No differences in response between switch to an SSRI and switch to an SNRI, nor were there differences in response among the three SSRIs tested. More side effects with VEN.
- Participants with more severe depression, greater family dysfunction, and alcohol/drug use at baseline were less likely to remit.
- Remitters diverged from non-remitters by the first 6 weeks of treatment ($p<.001$).
- Of the 130 participants in remission at week 24, 25.4% relapsed in the subsequent year.

Vitello et al 2011 J Clin Psych

Studies you should know: CAMS

- Child-Adolescent Anxiety Multimodal Study
- 2 phase, multicenter randomized controlled trial
- Subjects age 7-17
- With SAD, GAD or social phobia

CAMS- stages

- Stage 1: 12 weeks of
  - Sertraline
  - CBT
  - Sertraline + CBT
  - Placebo
- Stage 2: 6 month open extension for those with response in Stage 1

Treatment

- Therapeutic basics: in the office
- Education- normalize the symptoms
- Children can name their anxiety
- Ask what helps, and what doesn't
- Teach parents to avoid reassurance
- Look for and eliminate secondary gain from avoidant behaviors (staying home from school and playing all day).

Therapy- CBT

- Cognitive Behavioral therapy is first line treatment for mild to moderate anxiety of all types.
- Based on the idea that changing thoughts and behaviors changes the feelings.
- Generally time-limited, with structured (manualized) sessions – often modular so the program can be targeted to child's needs.

Exposure

- The cornerstone of CBT for anxiety.
- Instead of avoiding, you face the fear, over and over until it no longer causes the fear reaction (desensitization).
- Fear ladder: breaking down and ordering fears into hierarchies that can be approached from the bottom, least feared.
- Practice!

Cognitive restructuring

- Child learns to identify the thoughts that go with the fear.
- She learns to assess whether is it is likely to be true.
- She learns to ask if it is a helpful thought.
- She learns to generate alternate thoughts or explanations, and see if they might be true and/or helpful.

Relaxation

- Help the child identify the bodily sensations of anxiety, and then to relieve them by breathing techniques or guided muscle relaxation.
- Mindfulness is another technique that can be used in conjunction with relaxation in children; rather than challenging anxious thoughts, let them pass by without generating any reaction at all.

SSRIs: safety and side effects

- Common side effects: stomachaches, headaches, insomnia, restlessness.
- Anxious children often get more side effects- start low, go slow.
- Activation (increased activity, disinhibition, impulsivity, subthreshold manic symptoms) can occur.
- Black box warning: suicidal ideation

Prescribing SSRIs

- FDA Approval
  - Adolescent depression: fluoxetine and escitalopram
  - Child depression: fluoxetine
  - Adolescent anxiety: duloxetine (approved in 2014 for age 7-17 with GAD)
  - Child and adolescent OCD: sertraline, fluvoxamine
- Side effects
- Dosing

SSRIs: prescribing

- Pick 1 or 2 (FDA approved) and stick with them.
- Sertraline: can start with 25 mg or even 12.5 mg, max 200 mg.
- Fluoxetine: comes in a liquid, so can start very low if desired. Generally start with 10 mg, max 40 mg.

SSRIs, continued

- If a child is not responding to an SSRI at a low to moderate dose in 6 weeks, switch, or consider refer out.
- If a child has acceptable symptom reduction, plan to treat 6-9 months, tapering off the medication at a time when the child's life is very stable.

When to refer out

- 1. danger to self or others
- 2. significant change in function without apparent cause or precipitant
- 3. caretaker of child is unable to cooperate with plan of care, or has emotional impairment
- 4. child has significant impairment in daily function
- 5. child requires inpatient psychiatric care
- 6. child's symptoms have not responded to 6-8 weeks of intervention

When to refer out, continued

7. when there are complex diagnostic issues
8. when symptoms arise from history of abuse, or removal from home
9. when there is high risk of adverse response to medication treatment
10. when a child needs treatment with more than 2 psychotropic medications
11. when considering psychotropic medication in a child under the age of 5
12. when a child with a chronic medical condition has behaviors that seriously interfere with treatment of that condition.

(from Rockhill 2010)

Questions

- First line treatment for mild to moderate anxiety in a child or adolescent is:
- A. an SSRI
- B. Cognitive Behavioral Therapy
- C. Psychotherapy
- D. a benzodiazapine

Answer: B. CBT is first line treatment for mild to moderate symptoms.

Questions

- In a teen with Irritable Bowel Syndrome and Social Phobia who has become school avoidant:
- A. the abdominal pain is the most likely reason the child is missing school
- B. Cognitive Behavioral Therapy can improve both the Social Phobia and IBS symptoms
- C. Xanax given prn may significantly improve attendance
- Concurrent depression is unlikely.

Answer: B. CBT is effective for social phobia and for IBS.

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