Childhood Anxiety and Depression

Psychiatry Day Max Rady College of Medicine University of Manitoba December 14, 2018 Leonard Schwartz, MD, FRCPC Staff Psychiatrist Child and Adolescent Mental Health Department of Psychiatry

Today's structure:

- Introductory Slides
- Case One
- Overview: Depression in Children and Adolescents
- Case Two
- Overview: Anxiety in Children and Adolescents
- Conclusion and Discussion

DISCLOSURE OF CONFLICT OF INTERESTS:

NONE

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OBJECTIVES FOR THIS PRESENTATION

- To provide an overview of the diagnosis and treatment of childhood mood and anxiety disorders
- ➤ To illustrate, through case examples, common presentations of these disorders
- To describe first-line therapies for mood and anxiety disorders in children and adolescents

CASE ONE:

- > 14 y.o. female, lives with parents, male sib
- Grade Nine student, does well academically
- Upset, angry, conflict with parents about school
- Conflict: wants marks above 90
- > Parents worried, patient "not concerned"

- A. Mood Disorder
- B. Anxiety Disorder
- C. Perfectionism
- D. Parent-Child Relational Problem
- E. Need More Information

- > Onset Grade Seven: angry about academic results
- Parents had pressured her to do well (not now)
- "I blame myself for making mistakes"
- "I suck at everything, I hate myself"
- "My marks have gone down, I have trouble focusing"
- Poor sleep, poor hygiene, decreased appetite, SI

- A. Mood Disorder
- B. Anxiety Disorder
- C. Perfectionism
- D. Parent-Child Relational Problem
- E. Need More Information

MOOD DISORDERS - DSM V

- ➤ Bipolar I Disorder
- ➤ Bipolar II Disorder
- > Cyclothymic Disorder
- ➤ Major Depressive Disorder
- Persistent Depressive Disorder (Dysthymia)
- > Premenstrual Dysphoric Disorder
- > Unspecified Depressive Disorder

CHILDHOOD MOOD DISORDERS WHAT ARE THE MOST COMMON COMORBIDITIES?

- A. Anxiety Disorders
- B. Attention deficit/hyperactivity disorder (ADHD)
- C. Oppositional Defiant Disorder (ODD)
- D. Conduct Disorder
- E. Alcohol and Substance Use Disorders
- F. All of the above

CHILDHOOD MOOD DISORDERS

Features of Childhood Depression

- Relatively uncommon in young children (1-2%, ♂
 = ♀)
- Incidence ↑ with early-mid adolescence (4-5% mid-teens, ♀ > ♂)
- > MDD 11-20% of adolescents
- > Suicide is a leading cause of death
- > High risk of recurrence: 50-70% in five years
- > Social, familial and academic functions

CHILDHOOD MOOD DISORDERS

Features of Childhood Depression

- Anxiety precedes depression in children, early adolescence
- In late teens may be the same or reversed (depression first)
- ➤ Increased risk associated with Adverse Childhood Experiences (ACE) Dr. T. Afifi
- Persistence into adulthood

CHILDHOOD MOOD DISORDERS A DEVELOPMENTAL PERSPECTIVE

- Effect of both family history and exposure to psychosocial stress
- >5-HTTLPR gene (Serotonin Transporter)
- ➤ One variant ↑ risk
- Neurocognitive and neuroendocrine pathways

CHILDHOOD MOOD DISORDERS A DEVELOPMENTAL PERSPECTIVE

- Neural Circuits involved in processing of threats, rewards
- Threats: Amygdala, hippocampus and prefrontal cortices (HPA)
- Rewards: Striatum, prefrontal cortex and ventral dopamine systems
- Circuits continue to mature and show gender differences

CHILDHOOD MOOD DISORDERS WHY THE GENDER DIFFERENCE?

- > Variety of possible mechanisms
- Differences in cognitive processing of stressful events, coping styles
- > Greater exposure or sensitivity to psychosocial stressors ($\mathcal{L} > \mathcal{L}$)
- Hormonal changes associated with pubertal maturation
- > Changes in underlying brain development?

CHILDHOOD MOOD DISORDERS WHICH TREATMENT SHOULD YOU USE FIRST?

- A. Fluoxetine
- B. Sertraline
- C. Citalopram/Escitalopram
- D. Paroxetine
- E. Tricyclic Antidepressants
- F. None of the Above

CHILDHOOD MOOD DISORDERS TREATMENT CONSIDERATIONS

- NICE (National Institute for Health and Care Excellence)
- Four week period of watchful waiting (mild depression)
- ➤ CBT for initial treatment of mild depression (2-3 months)
- Then: referral to Child and Adolescent Psychiatry

CHILDHOOD MOOD DISORDERS TREATMENT CONSIDERATIONS

- Moderate-severe depression: CBT, Interpersonal Therapy (IPT), Family Therapy
- ➤ If no response after 4-6 sessions, consider medication
- Medication to be combined with psychological therapy

CHILDHOOD MOOD DISORDERS TREATMENT CONSIDERATIONS – MEDICATION

- > First line: Fluoxetine
- Second line: Sertraline, Citalopram, Escitalopram
- Avoid Venlafaxine, Paroxetine, TCA's due to side effects

CHILDHOOD MOOD DISORDERS TREATMENT CONSIDERATIONS – MEDICATION

- Treatment for Adolescents with Depression Study (TADS)
- ➤ Fluoxetine 12 week response rate 61% (placebo 35%)
- > Sertraline, Escitalopram also superior to placebo
- Other SSRI's, Venlafaxine, Mirtazapine not > placebo

CHILDHOOD MOOD DISORDERS TREATMENT CONSIDERATIONS – SUICIDALITY

- ➤ 2003 US FDA black box warnings re SSRI's, suicidality
- ➤ Meta analysis: 4582 patients, 24 pediatric trials
- ≥ 20 trials modest ↑ in suicidality (RR 1.66 95% CI 1.02 2.68) with use of SSRI's
- Since then: Risk of suicidality << benefit to the patient</p>
- > NNT: 10 NNH: 143

- CBT: most studied treatment for adolescent depression
- > Treatment of choice in UK for mild depression
- Focus on helpful behavior, challenges negative thoughts
- ➤ Early studies significant ↑ effect size (poor methodology)

- >TADS study (US): CBT = placebo
- ➤TADS study: Fluoxetine + CBT significant ↑ effect size
- Treatment of Resistant Depression in Adolescents (TORDIA)
- ➤ TORDIA: Use of other SSRI + CBT ↑ ↑ effect size



- Interpersonal Therapy (IPT), Family Therapy (FT), Psychodynamic Psychotherapy (PPT), Dialectical Behavior Therapy (DBT)
- ➤ IPT: decrease symptoms by improving relationships
- Limited evidence: modest effect size
- > Family Therapy (FT): aims to reduce conflict
- FT not > brief psychosocial intervention



- ➤ PPT: Focus on interpersonal relationships, attachment and life stressors, with explicit focus on the relationship with the therapist
- Recent RCT demonstrated that PPT is as effective as CBT
- DBT: particularly helpful for reducing suicidal/self injurious behavior

Differential Diagnosis on Psychiatric Assessment:

- Persistent Depressive Disorder with Anxious Distress
- Rule Out Unspecified Anxiety Disorder
- Parent Child Relational Problem

TREATMENT RECOMMENDATIONS

- Patient on Fluoxetine started 3 months earlier by GP
- Buproprion SR for focus, concentration issues
- Melatonin for sleep problems

TREATMENT RECOMMENDATIONS

- Individual treatment with therapist at HSC
- Letter to school re educational accommodations
- Family therapy at HSC for conflict with parents

CASE TWO:

- ➤ 16 y.o. female, lives with mother, female sib
- Grade Eleven student, struggles academically
- > Problems with focus and concentration
- > Very nervous at school, public places

- Stopped playing soccer at age 8 ("butterflies")
- Avoids parties, not dating yet, trouble ordering food, asking directions/help (talking to stranger)
- ➤ Brief sadness (2-4 hours), mood "in the middle"

- A. Mood Disorder
- B. Anxiety Disorder
- C. Attention Deficit/Hyperactivity Disorder
- D. Parent-Child Relational Problem
- E. Need More Information

- "Sad when I fight with friends, or can't speak up in class"
- "I get frustrated, feel like I can't get my point across"
- "I can't breathe, need fresh air, need to leave class"
- Nightmares, "sleep paralysis" Melatonin had no effect

- No SI, no self harm, no appetite change, no drugs/ETOH
- Separation anxiety from age 1 to age 11
- Difficulties maintaining attention, focus ("daydreaming")

- A. Mood Disorder
- B. Anxiety Disorder
- C. Attention Deficit/Hyperactivity Disorder
- D. Parent-Child Relational Problem
- E. Need More Information

ANXIETY DISORDERS - DSM V

- ➤ Generalized Anxiety Disorder (GAD)
- ➤ Panic Disorder (PD)
- > Agoraphobia
- ➤ Social Anxiety Disorder (SAD)
- ➤ Specific Phobia
- ➤ Separation Anxiety Disorder
- > Selective Mutism
- Unspecified Anxiety Disorder

ANXIETY DISORDERS - DSM V

- Obsessive-Compulsive Disorder (OCD) now in its own Section
- Posttraumatic Stress Disorder (PTSD) now in its own Section
- Separation Anxiety Disorder and Selective Mutism now in Anxiety Disorder Section
- ➤ All Anxiety Disorders can carry "with panic attack" specifier

ANXIETY DISORDERS BASELINE INVESTIGATIONS

- Complete blood count and Electrolytes
- Fasting glucose and lipid profile
- Liver enzymes
- Serum bilirubin
- Serum creatinine
- Urinalysis

ANXIETY DISORDERS BASELINE INVESTIGATIONS

- Urine toxicology for substance use (if indicated)
- 24-hour creatinine clearance (if history of renal disease)
- Thyroid-stimulating hormone
- Pregnancy test (if relevant)
- Prolactin

CHILDHOOD ANXIETY DISORDERS WHAT ARE THE MOST COMMON COMORBIDITIES?

- A. Mood Disorders
- B. Attention deficit/hyperactivity disorder (ADHD)
- C. Oppositional Defiant Disorder (ODD)
- D. Conduct Disorder (CD)
- E. Alcohol and Substance Use Disorders
- F. All of the above

CHILDHOOD ANXIETY DISORDERS

Features of Childhood Anxiety

- Relatively common in children and adolescents
- ➤ Prevalence in youths ranges from 2% to 4%
- ➤ 6- and 12-month estimates between 10% to 20%
- > Similar estimates in preschool children

CHILDHOOD ANXIETY DISORDERS

Features of Childhood Anxiety

- ➤ Median age of onset of SAD age 13
- >75% of SAD patients onset at ages 8-15
- Anxiety symptoms in young children may be clinically significant even if full criteria are not met
- > Somatic symptoms common
- Disorders persist into Adulthood

CHILDHOOD ANXIETY DISORDERS WHICH TREATMENT SHOULD YOU USE FIRST?

- A. Fluoxetine
- B. Sertraline
- C. Citalopram/Escitalopram
- D. Paroxetine
- E. Benzodiazepines
- F. None of the Above

CHILDHOOD ANXIETY DISORDERS TREATMENT CONSIDERATIONS

- Treatment of anxiety disorders of mild severity and minimal impairment should begin with psychotherapy
- > Combine psychotherapy with medication treatment:
 - moderate to severe anxiety
 - when treating a comorbid disorder
 - > when partial response to psychotherapy alone.

CHILDHOOD ANXIETY DISORDERS TREATMENT CONSIDERATIONS

- Child/Adolescent Anxiety Multimodal Study (CAMS)
- Placebo-controlled trial in teens with moderate to severe SAD and/or GAD
- CBT, Sertraline, or placebo compared with combination treatment with Sertraline and CBT

CHILDHOOD ANXIETY DISORDERS TREATMENT CONSIDERATIONS

- > CBT (60% improved)
- Sertraline (55% improved)
- Combination of CBT and Sertraline (81% improved) had a response rate superior to either modality alone
- All 3 of these active treatments were recommended

CHILDHOOD ANXIETY DISORDERS COGNITIVE BEHAVIORAL THERAPY COMPONENTS

- Psychoeducation with child and parents
- Somatic management skills training: muscle relaxation, diaphragmatic breathing, relaxing imagery
- Cognitive restructuring: challenging negative thoughts and expectations, learning positive self-talk

CHILDHOOD ANXIETY DISORDERS COGNITIVE BEHAVIORAL THERAPY COMPONENTS

- Practicing problem solving: potential solutions for anticipated challenges
- > Create an action plan ahead of time
- > Exposure methods: imaginal and live exposure
- Gradual desensitization to feared stimuli
- Relapse prevention plans: booster sessions and coordination with parents and school

CHILDHOOD ANXIETY DISORDERS TREATMENT CONSIDERATIONS - MEDICATION

- >SSRI's are first-line therapy
- Monitor for worsening depression, agitation, or suicidality
- >SSRIs well tolerated by children
- Common adverse effects: GI symptoms, headache, increased motor activity, and insomnia

CHILDHOOD ANXIETY DISORDERS TREATMENT CONSIDERATIONS - MEDICATION

- Less common adverse effects: disinhibition, agitation or aggression
- ➤ If present, reduce the dose of the SSRI
- > If suicidal, decrease and discontinue
- ➤ Prior to initiation of medication: Screen for Bipolar Affective Disorder (including family history)

CASE TWO (continued):

Differential Diagnosis on Psychiatric Assessment:

- Social Anxiety Disorder
- > R/O Unspecified Depressive Disorder
- Parent Child Relational Problem

CASE TWO (continued):

TREATMENT RECOMMENDATIONS

- Rx Fluoxetine 10/20/30/40 mg po od increasing at weekly intervals for anxiety, mood issues
- Rx Trazodone 25-50 mg po hs prn for sleep problems
- Individual treatment with therapist at HSC

CASE TWO (continued):

TREATMENT RECOMMENDATIONS

- Refer to OT Group Therapy at HSC for CBT
- Letter to school re educational accommodations
- Follow up 2 weeks to reassess, ADHD assessment



