PEDIATRIC PSYCHOPHARMACOLOGY FOR NON-MDS

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LEARNING OBJECTIVES

- Understand the role a child psychiatrist can play as part of a clinical team during a diagnostic and treatment process.
- Recognize major classes of psychopathology for which medication treatment might be appropriate.
- Understand how non-MDs can effectively collaborate with MDs on medication management: psychoeducation, rating scales, develop basic understanding some principles of medication management.
- Identify how to get a child psychiatrist on your team if you don't already have one.

ROLE OF THE PSYCHIATRIST, PART I

- Are you referring a patient to the psychiatrist or is the psychiatrist referring to you?
- Different types of treatment settings.

ROLE OF THE PSYCHIATRIST, PART 2

- Diagnostic Assessment: clinical interview with parents and child, collateral history from multiple sources, clinical rating scales, review of prior records, testing etc.
- Recommendations for further evaluation.
- Treatment recommendations.
- Participation in the treatment plan: consultant role vs. treating physician.
- Medication management, collaboration with pediatrician, psychologist, social worker, family, other therapies.

HOW TO INVOLVE A CHILD PSYCHIATRIST, PART I

- **Getting the family on board:** Psychoeducation about what a child psychiatrist does: clarify the diagnosis, liaise with PMD, school, and other members of team, prescribe and manage medication, provide other types of therapies.
- **Keeping the family on board:** contingency plan for how to deal with urgencies and emergencies; support around conveying info to MD, including completion of rating scales, monitoring of efficacy and side effects.

HOW TO INVOLVE THE CHILD PSYCHIATRIST: PART II

- **Getting the child psychiatrist on board:** show your own expertise in diagnosis and treatment; provide a clear consultation question; report valuable information about your work with child, family, and school; provide rating scales.
- **Keeping the child psychiatrist on board:** support the treatment alliance, provide regular feedback (narrative and rating scales).

WHAT PEDIATRIC DISORDERS DO PSYCHOTROPIC MEDICATIONS COMMONLY HELP?

- Attention-Deficit Hyperactivity Disorder (stimulants, non-stimulants).
- Anxiety Disorders (antidepressants, benzodiazepines, antipsychotics).
- Mood Disorders (antidepressants, mood stabilizers, antipsychotics).
- Other disorders, including psychotic disorders, tic disorders, substance use disorders, sleep disorders.

WHEN DOES MEDICATION HELP?

- When the psychiatrist, therapist, patient and family have a good relationship!
- When patients actually take their medication as prescribed!
- Collaboration.
- Collaboration.
- Collaboration.

CASE 1: ADHD AND ODD

- Sam is an 8-year-old second grade boy who was referred to your center for evaluation of hyperactivity and impulsivity at age 7. After a comprehensive diagnostic process, he was diagnosed with ADHD, Combined Presentation, and Oppositional Defiant Disorder. Initial recommendations included a course of PCIT for disruptive behavior and medication treatment of ADHD symptoms. Family agreed to therapy but wanted to hold off on medication. Now it is one year later, and the child's behavior is less disruptive, but he continues to struggle academically and socially, and the parents ask you what to do next.

CASE 1: ADHD AND ODD, PART II

- Provide positive, supportive feedback to the parents for continuing the process.
- Get new data (rating scales) from parents and school>>SNAP shows fewer hyperactive symptoms but unchanged inattention ones.
- Screen (rating scales) for interim development of anxiety or mood disorder, unmasking of learning issues, psychosocial disruption>>nothing new.
- Refer back to child psychiatrist>>recs include stimulant trial for treatment of ADHD, and organizational skills training. Cardiac history and exam unremarkable. Child starts extended release methylphenidate 18mg.

STIMULANT BASICS FOR NON-MDS, I

- Mechanism of action: stimulates likely increase the overall availability of dopamine by blocking presynaptic neuronal reuptake.
- Types of stimulants: methylphenidates vs. amphetamines; short-acting vs. long-acting.
- Standard dosing: increase weekly to desired effect.
- Dosage forms: tablets, capsules, liquid, transdermal patch.

STIMULANT BASICS FOR NON-MDS, 2

- How to administer: swallow whole, sprinkle, dissolve, chewable, transdermal patch.
- Common side effects: decreased appetite, insomnia, nausea, headache.
- Less common: palpitations, increased sweating, anxiety, irritability, psychosis, unmasking of tics.
- Emergency: chest pain, syncope, severe headache.
- Rebound phenomenon.

STIMULANT BASICS FOR NON-MD, 3

- Will my child develop cardiac problems?
- Will my child grow normally?
- Will my child become addicted and/or develop a substance use problem?
- Will my child ever be able to stop taking these medications?
- Should I be taking the same medication as my child?
- Are there medications that help if stimulant does not work, or if there are contraindications to use?

BACK TO CASE 1: ADHD AND ODD

- During the first week, Sam does not have much appetite and has trouble sleeping, but no changes at school>>dose increased to 36mg in the second week of treatment.
- SNAPs re-done week 2-3: big improvement at school, able to take in org skills, but blinking tic becomes more prominent and he can't sleep>>you counsel parents re: sleep hygiene.
- Tic does not subside and sleep continues poor at week 6. Psychiatrist adds low-dose alpha-agonist and both improve.

NON-STIMULANT ADHD MEDICATIONS

- Alpha-agonists
- Atomoxetine
- Tricyclics
- Bupropion

MANAGING SIDE EFFECTS OF ADHD MEDS

- Adjust dosing/time of dosing.
- Add low-dose immediate-release form, or non-stimulant.
- Dietary recommendations.
- Drug holidays.
- Sleep hygiene.
- Don't be afraid to ask for a change.

BACK TO CASE 1: ADHD AND ODD

- Sam finishes second grade and prepares for the transition to 3rd grade. Let's re-cap how you helped him:
  1. PCIT.
  2. 504 Accommodations/Organizational skills.
  3. Medication trial has helped and side effects minimized. Plan for summer—keep him on meds for camp, go off medication during month before school starts. SNAPs again in early fall.
- Parents feel more confidant with parenting, child is more successful at school and socially.

CASE 2: OBSESSIVE COMPULSIVE DISORDER

- Sophie is an 12-year-old sixth grader who is referred to your specialized anxiety disorders service by her pediatrician due to concerns that gradual weight loss is related to anxiety. No medical causes have been found and there is no evidence of an eating disorder. At age 8, she had been diagnosed with Specific Phobia after another episode of weight loss, in which it was eventually determined that she had a fear of choking. She had a course of CBT with another provider, and she improved somewhat, including tolerating more solid foods and making gains on her growth chart, although she never returned to her previous growth trajectory. Four years later, at her 12-year-checkup, her PMD again noted mild weight loss, and elicited a history of fears about contamination of food, and avoidance of the lunchroom and the family table, that had largely gone unnoticed. After taking a careful history with family and child, obtaining collateral from multiple sources, and using semi-structured diagnostic instruments such as the Anxiety Disorders Interview Schedule (ADIS-IV) and the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS), it is determined that Sophie has likely had subclinical OCD symptoms since about age 6, does not actually seem to have any other anxiety disorders, and and that her obsessions and compulsions have worsened in the setting of new social pressures related to the transition to middle school. She also has several depressive symptoms, but no suicidal thinking. You and the staff child psychiatrist develop the treatment plan together.

CASE 2: OCD

- You start a course of extensive psychoeducation for child and family, as well as exposure-based CBT and cognitive restructuring.
- The child psychiatrist also recommends starting medication treatment right away with a Selective Serotonin Reuptake Inhibitor (SSRI), given the long duration of lower-level symptoms, the recent exacerbation, and the associated depressive symptoms.
- Child starts fluoxetine 5mg, and over the next 4 weeks, the dose is gradually increased to 20mg.

SSRI BASICS FOR NON-MDS

- Mechanism of action: reduce presynaptic re-uptake of serotonin, and thus increase the overall level of serotonin available to the postsynaptic neuron.
- Common agents: citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline.
- FDA-approved SSRIs for pediatric OCD: fluoxetine, fluvoxamine, sertraline.
- Dosing: start low, go slow.
- Dosage forms: tablet, capsule, liquid.

SSRI BASICS FOR NON-MDS

- Common side effects: nausea and GI upset, sleep changes, sedation, sexual side effects.
- Most common less common side effect: Activation.
- Less common side effects: headache, increased sweating.
- Emergency adverse reactions: agitation, suicidal thinking, mania.

SSRI BASICS FOR NON-MDS

- Will this medication cause my child to commit suicide?
- Will this medication cause my child to become manic?
- How long before we see results?
- Will my child have to take this medication forever?
- What happens if this medication does not help?

BACK TO THE CASE: OCD

- Sophie starts taking medication and engaging in CBT. You are also coaching the parents about how to decrease accommodations of symptoms.
- Minimal change for the first month and it has been hard engaging child in CBT. Child complained of upset stomach for 2 weeks. By week 6, more positive attitude noted and slight decrease in both obsessive thinking and compulsive symptoms noted, and no more side effects reported. Doing better in therapy. No weight loss.
- Fluoxetine dose increased to 30mg. Dramatic remission of symptoms by week 12. (Still following CY-BOCS).
- You continue to see the child for the remainder of the school year to help consolidate her gains and keep building skills.

CASE 3: DEPRESSION AND SELF-INJURY

- Ella is a 17-year-old junior referred to you by her school counselor for evaluation of self-injurious behavior. On presentation, she describes making superficial scratches to the dorsal surface of her forearm with a safety pin or sharp ruler for the past 2 years. She denies suicidal intent, although she thinks about dying a few times per month, and says she cuts herself about once per week. She says she cuts herself because it makes her feel better when she is anxious, frustrated or sad. She was diagnosed with depression at age 15 by her pediatrician after a positive PHQ screen, and has been taking fluoxetine 40mg since that time. Her parents and older brother all have a history of depression and have been treated successfully with fluoxetine in the past. The family is focused on making sure that she is well enough to prepare for standardized testing and the college application process. They ask if extra time for testing would help.

CASE 3: DEPRESSION AND SELF-INJURY

- You and psychiatrist perform a comprehensive assessment, combining clinical interview with teenager, and family, and school reports with multiple rating scales, including Columbia DISC and Columbia Suicide Severity Rating Scale, and Childhood Interview for DSM-IV Borderline Personality Disorder.
- You meet with parents as a team to discuss your diagnostic impression--Major Depressive Disorder and features of Borderline Personality Disorder—and to treatment plan recommendations. First step is to re-frame parental expectations.

CASE 3: DEPRESSION AND SELF-INJURY

- Skills-based therapy commenced: dialectical behavioral therapy, individual and group, family skills group.
- From a medication perspective, fluoxetine is inadequately treating the depression.
- The psychiatrist initiates a cross-titration from fluoxetine to escitalopram, with a goal dose of 10-20mg.

CASE 3: DEPRESSION AND SELF-INJURY

- One month into treatment, Ella is discovered in school bathroom using a boxcutter from art lab to cut herself on the back of her wrist. School sends her to the emergency room. Urine toxicology in ED is positive for marijuana and amphetamines. Ella reveals that she has been smoking to try to feel better, and used a friend's stimulant when she had to stay up all night to finish a paper. Family wants to send her to residential treatment. You and psychiatrist recommend continuing current skills-based treatment for both adolescent and family.

SELF-INJURY AND MEDICATION TREATMENT?

- Core treatment is integrated, team-based model, ideally in a multidisciplinary setting. Both patient and family need to be engaged.
- Core treatment is skills-based psychotherapy, such as CBT or DBT, that specifically assesses and engages the reason for self-injury. First stage of treatment involves ongoing assessment of frequency and severity of self-injury.
- Medication, usually SSRI or other antidepressant, can treat underlying depression or anxiety. Adjunctive or alternate treatment might include a low-dose mood-stabilizer or antipsychotic.
- Sleep hygiene, exercise, avoidance of substance.

BACK TO THE CASE: DEPRESSION AND SELF-INJURY

- After a rocky start, patient and family committed to treatment and completed full DBT program over the course of 12 months.
- Ella stayed on SSRI and depressive symptoms improved.
- Self-injury resolved.
- No further episodes of acting out with substances.
- Able to focus on planning for college.

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HELPFUL RESOURCES

- For general info and help finding a child psychiatrist in your area: American Academy of Child and Adolescent Psychiatry http://www.aacap.org/Default.aspx
- Cohen Children's Hospital Northwell Health ADHD medication guide http://www.adhdmedicationguide.com/