SYMPTOM MANAGEMENT WITH PSYCHIATRIC MEDICATIONS IN ADULTS WITH AUTISM SPECTRUM DISORDER

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GENERAL DISCLOSURES

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OBJECTIVES

• Become familiar with common co-occurring psychiatric conditions in ASD/DD
• Understand unique features of psychiatric conditions and their treatment in ASD/DD
• Become familiar with pharmacological (and non-pharmacological) strategies to address co-occurring psychiatric conditions in ASD/DD
CASE #1

- 18 yo female
- Hospitalized age 9 for suicidality – dx’ed with OCD, major depression
- Hyperfocused interest in horses
- Trouble reading/writing due to perfectionism
- Very few friends; difficulty sustaining friendships
- Struggled in school until moved to small alternative high school
- Dx’ed with ASD age 13
  - WAIS - full IQ - 100; verbal comp - 105; perc reasoning - 102; working memory - 125; processing speed - 65
CASE #1 (CONT.)

- Planning for GED
- Attending vocational school in Fall
  - Large animal vet tech degree
- Still cutting/suicidal ideation as recently as 6 months ago
  - Benefiting from DBT – “building her tool chest”
  - Current meds – aripiprazole, bupropion, duloxetine
- Exam
  - Blunted affect; flat prosody of speech; very quick response time in answering questions (strongly opinionated); eye contact reduced
CASE #2

- 29 yo male
  - Diagnosed with ASD age 5
  - Minimally verbal

- Age 19
  - Resurgence of aggression and property destruction (symptoms from earlier years returning)
    - Living with mom, sibs off to college
    - Dog phobia

- Exam – minimally verbal, but better verbal comprehension; responded excitedly during discussion of possible new recreational activities
CASE #2 (CONT.)

• Age 19-29
  – Added aripiprazole and citalopram
  – Started attending classes at the Alyssa Burnett Adult Life Center
  – Started working with behavioral therapist
  – Behaviors have reduced significantly
  – Mom now looking at other living options
MENTAL HEALTH OVERVIEW IN ASD

• **Inpatient hospitalization** - tripled between 1999-2009 for adolescents with ASD (Nayfack, 2014)

• **Risk factors** for psychiatric hospitalization (Mandell, 2008)
  – Aggression, self-injury, depression, single-parent home, sleep disturbance

• 53% of total healthcare for a child with ASD is incurred by 10% of the ASD population (Croen et al, 2006)
  – Primarily driven by psychiatric hospitalization
In some cases, the co-occurring conditions can cause a greater barrier to success than the core features of ASD.
COMMON PSYCHIATRIC COMORBIDITIES IN ASD

• Anxiety Disorders
• Depressive Disorder and Suicide
• ADHD (inattention and impulsivity)
• Psychosis (including catatonia)
• Others
  – Bipolar Disorder
  – Obsessive-Compulsive Disorder
  – Tic Disorders

See Appendix Slides for details
GENERAL CONSIDERATIONS

• ASD as a “neurodevelopmental substrate”
  – enhancing likelihood of co-occurring mental health conditions

• Atypical symptom manifestation in ASD
  – Self-injury, irritability, aggression, bizarre movements and behaviors

• Overlap of ASD core features and symptoms of other mental health disorders
  – Often delays recognition and treatment of mental health disorder (Bakken, 2010)
  – Or the reverse – psych dx can delay recognition of ASD

• Recognition and reporting of internal state may be difficult
BEHAVIORAL SYMPTOMS CAN INCREASE CORE DEFICITS IN ASD

Treatment can be aimed at reducing associated symptoms that interfere with functioning and may be exacerbating core deficits.
BUT, BEFORE REACHING FOR THE PRESCRIPTION PAD...

- Is the “disruptive” behavior functional (i.e. serving a purpose)?
- Are there environmental factors influencing the disruptive behavior, and, if so, can they be modified?
OVERVIEW OF PSYCH MEDS IN ADULT ASD

• **Systematic evidence of benefit lacking** (Dove, 2012)
  – No FDA approved med for adults
    • **aripiprazole and risperidone** only meds approved in children
  – Lack of empirical evidence allows for “choosing your favorite”
  – Family history to medication response may influence choice

• **Despite lack of evidence, psych med use is common**
  – **Atypical antipsychotics, SSRIs, and stimulants** most commonly used (Esbensen, 2009)
  – 80% of all adults on psychotropics
  – Steady increase in use of psychopharm agents with age
  – Once on psychotropic, likely to stay on

• **Poly-pharmacy is common** (Tsiouris, 2013)
  – mean – 1.51 meds in adults with ID/autism
CHALLENGING ASPECTS OF PSYCH MED TREATMENT IN ASD

• **Identify the target symptom** before starting treatment.
  – Narrow target symptom(s) and expectations

• **Measuring response** is challenging.
  – Subjective (often from observer) assessment of benefit

• **Adverse events** are common.
  – Idiosyncratic responses are more common
  – Adverse events can be reported as increase in core symptoms or target symptom

• Beware of **regression to the mean**.
  – Sometimes inappropriately attribute improvement to the medication.
BASIC PRINCIPLES OF PSYCH MEDS IN ASD

• Maximum dose is often less than prescribed to typically developing individuals.
• Start LOW and go SLOW!
• Avoid polypharmacy if possible.
• Common pitfalls:
  – Misattribution of med effect due to other life changes
  – Positive response could be “regression to the mean”
  – Reporting by caregiver strongly influenced by placebo effect/belief system
  – Leaving medication on board when only minimal benefit is seen
  – Benefit/failure at young age not always predictive of response at later age
COMMONLY USED PSYCH MED CLASSES IN ASD

• Antidepressants
  – SSRIs most common

• ADHD Meds
  – Stimulants – long acting preferred
  – Non-stimulants (alpha-agonists, atomoxetine, amantadine)

• Antipsychotics
  – Risperidone and aripiprazole most studied

• Anxiolytics
  – Benzodiazepines (more commonly “prn” use; lorazepam for catatonia)
  – Beta-blockers

• Mood stabilizers
  – AEDs (lamotrigine, valproic acid, carbamazepine) and lithium
ANXIETY AND ASD

• Incidence **increases with improving self-awareness**
  – Can emerge as developmental progress is occurring

• Often provoked by changes in routines, new social situations, difficult task demands, etc.

• **Presentation variable**
  – fearfulness, irritability, tantrums, self-injurious behaviors, aggression, obsessive questioning, repetitive behaviors, etc.
TARGETING ANXIETY IN ASD

• SSRIs most commonly used
• SNRIs also used
• Consider buspirone
• Avoid benzodiazepines if possible
  – Effective as “prophylactic prn” for blood draws, dental visits, etc.
  – Consider hydroxyzine as first line alternative
• Consider alpha-agonists or beta blockers as these might be therapeutic for “hyperarousal”
• Don’t forget importance of physical exercise, physical health, and sleep!
DEPRESSION AND ASD

• As with anxiety, **increased in ASD vs. other DDs** (especially ASD *without* ID)
  – Developmental progress in **self-awareness** can contribute
  – Increasing academic and social demands

• Again, **ASD can mask** and/or compound symptoms
  – social withdrawal, constricted affect, irritability, increased insistence on routines, disorganization, inattention.

• Suicide attempts 4-fold increase in ASD (Croen, 2015)
  • 10-fold increase in “high-functioning” ASD (without ID)
  • LGBTQ+ identity may increase risk
TARGETING HYPERACTIVITY, IMPULSIVITY AND INATTENTION IN ASD

• Co-occurring ADHD in ASD estimated at 30-85%
• Most common treatment is medication
  – Psychostimulants most common – long-acting preferred
  – Some evidence for alpha-2 agonists (guanfacine, clonidine).
  – Limited studies of atomoxetine
• Don’t forget interplay between inattention and anxiety/mood
• Also, don’t forget importance of physical exercise, physical health, and sleep
ANTIPSYCHOTICS AND ASD

• Primary target in ASD is “behavioral dysregulation”
  – Irritability, aggression, self-injury, tantrum behaviors

• Secondary targets in ASD include
  – Mood, sleep, tic behaviors, compulsive behaviors
  – Hallucinations/psychotic features

• Typically reserved as “2nd line” due to side effect profile
  – Although can sometimes be highly therapeutic
  – Safety blood test monitoring may be challenging

• Evidence supports benefit at low dose
  – Safety blood test monitoring may be challenging
OTHER CONDITIONS TO CONSIDER IN ASD

• **Bipolar**
  – Consider when cycling of behavior/mood is seen
  – Cycling can be very rapid
  – Consider with *unexplained new onset insomnia*
  – Treatment combining antidepressant with mood stabilizers

• **Obsessive Compulsive**
  – Gray line between repetitive behaviors/OCD
  – Consider with new onset repetitive behavior
  – Treatment combining SSRI and anti-psychotics

• **Catatonia**
  – Seen more commonly in “syndromic” forms of autism
  – Can present as “excitable” form (difficult to differentiate from “self-stim”)
  – Consider with *unexplained new onset weight loss*
  – Treatment with high dose benzodiazepine

• **Tic Disorder**
  – Can emerge at later onset in ASD
  – Difficult to differentiate from “self-stim” behavior
  – Treatment with alpha agonists and anti-psychotics
IMPORTANCE OF LIFESTYLE AND HEALTH

• People with ASD (like other brain conditions) can improve mental health by attending to physical health and wellness
  – Strategies to address sleep, diet, exercise
  – Stress management (mindfulness therapy)
  – Community participation
RESOURCES

• AACAP Practice Parameter for the Use of Atypical Antipsychotic Medications in Children and Adolescents

https://www.aacap.org/AACAP/Resources_for_Primary_Care/Practice_Parameters_and_Resource_Centers/Practice_Parameters.aspx
REFERENCES


