

Medical Management of Complex ADHD

DD Plus Update

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Definition of Complex ADHD

- ***ADHD with associated developmental disability***
- ADHD with associated mental health conditions
- ADHD resistant to treatment

60-80% chance that child with ADHD will have comorbid condition:

Developmental disability (ASD, LD, ID, FASD)	20-50%				
Oppositional defiant behavior	15-70%	Conduct disorder	20-50%		
Anxiety	10-40%	Depression	10-30%	LD	20%
DCD	20-50%	Tic/Tourette	10-20%	Substance abuse	10-30%

(See Toolkit “Systematic Assessment of Comorbidities in ADHD”)

Challenges...and Opportunities

- High prevalence of common comorbid conditions
- High risk for abuse, trauma, emotional and behavioral problems
- Enormous toll of complex ADHD – morbidity and mortality
- Escalating health care costs
- Focus of existing guidelines is primary care psychopharm management
- New Complex ADHD guideline forthcoming from SDBP
- Comprehensive integrated team approach improves outcomes

Initial Evaluation and Management of ADHD

- Identify relevant medical, family, social history
- Identify concerns about developmental and learning difficulties
(see Toolkit “Diagnosis and Management of Specific Learning Disabilities”)
- Identify mental health concerns (history, observation, and useful tools, e.g., PSC, PHQ, SCARED, SCQ)
- Request relevant school records, e.g., teacher narrative, psych testing
- Address mental health concerns in primary care setting
www.aap.org/mentalhealth
- Evidence-based behavior therapy *(see Toolkit “ADHD Rx for Children <6”)*
- Titrate dose of ADHD medication to optimize response
- Determine if comorbid problems improve on follow-up

When to refer children with Complex ADHD

- PCP suspects complex ADHD

and/or

- Inadequate response to treatment
- Request consultation re diagnosis and management to DBPeds, Child Psychiatry, or Psychology
- DBPeds consultation may include medication management, child and family therapy, developmental therapies, psychological testing
- Anticipate end of co-management with improvement and stability

Treatment of Complex ADHD: Anxiety disorders, Bipolar disorder

- Consider which condition is most impairing
- Anxiety and demoralization may be secondary to untreated ADHD
- Pharmacogenomics and choice of SSRI?
- Industry-sponsored trial indicates that atomoxetine *may* be efficacious in treatment of ADHD plus anxiety
- Bipolar disorder
 - Coordinated and comprehensive behavioral health care
 - Use of divalproex and other mood stabilizers
 - Low dose stimulant may provide additional benefit

Depression, substance use disorders and ADHD

- Face to face assessment of substance abuse and suicide risk
- Substance use disorder and ADHD
 - Stabilize substance use – usually requires addiction treatment or psychotherapy
 - Should not receive ADHD treatment until abstinent, then reassess ADHD
 - Choose meds with low abuse potential: bupropion, atomoxetine, Vyvanse
- Depression and ADHD
 - Usually treat depression first
 - Chronic demoralization from untreated ADHD
 - Stimulants plus SSRI shown to be effective
 - Bupropion may be helpful as single agent
 - TADS trial – CBT plus fluoxetine more improvement by 12-18 weeks than SSRI alone

Tic disorders, Tourette syndrome (TS) and ADHD

- Comorbidity with ADHD common
 - ADHD in 25-70% of individuals with TS
 - Children with ADHD often have tics
 - MPH in ADHD plus tic disorder: the rule of thirds
 - Tics may persist, but impairment may be minimal
- Evaluate scope of comorbid diagnosis -ADHD, OCD, tics, anxiety
 - If tics primary, start with alpha agonist
 - If ADHD primary, start with stimulant, add alpha agonist if needed
 - If anxiety is primary, consider starting with SSRI
 - If s/e on stimulant, switch to atomoxetine
 - If tics are severe and resistant, add atypical antipsychotic
- Single drug versus polypharmacy
- Start low, go slow with drug titration

Pharmacotherapy of Pediatric OCD

- Distinguish OC behavior from stereotypies and other repetitive behaviors
- SSRIs and clomipramine are effective in OCD
 - Response rates 50-70%
 - Fluvoxamine and sertraline approved by FDA
 - Clomipramine has high rate of side effects
- Higher doses may be needed
 - fluvoxamine 100-200 mg or sertraline 50-100 mg/day
- Sufficient duration (8-12 weeks)
- Cognitive behavior therapy is effective and may decrease required doses of SSRI

ADHD in special populations

- Preschoolers with ADHD
- Children with autism spectrum disorder
- Children with intellectual disability

Stimulants in Preschoolers

- PATS study 165 of 303 children 3-5.5 yrs
- All received prior parent training – demonstrated efficacy
- MPH at 2.5, 5 and 7.5 mg TID
- Smaller effect sizes (.4-.8), only 22 % normalized.
- Side effects more common in preschoolers
- No significant safety concerns

J Amer Acad Child Adolesc Psychiatry 2006, 45, 1275-1322

Psychotropic Polypharmacy in children with ASD

- Psychotropic use common and increasing in ASD
- 64% of 33,600 on at least 1 medication
- 35% on 2 different classes of meds
- 15% on 3 or more
- Median length of polypharmacy 12 months
- Minimal evidence regarding multidrug combinations in children with ASD

Spencer et al, Pediatrics 2013;132:833-840

Common DSM5 diagnoses in ASD or I/DD

- ADHD (estimate 50% of children with mild ASD meet criteria for ADHD)
- Social anxiety disorder, generalized anxiety disorder, separation anxiety disorder
- Major depressive disorder, cyclothymic disorder
- OCD
- Tic disorders/Tourette syndrome
- PTSD (consequence of abuse, neglect)
- “Disruptive mood dysregulation disorder”
- “Intermittent explosive disorder”
- Self injurious behavior
- Sleep disorders

Stimulants in ASD and ID: Keys to effective management

- Consider developmental age of patient
- Set appropriate treatment expectations
- Rank or prioritize functional impairments
- Address behavior management
- Start low, but titrate dose for optimal effectiveness
- Don't switch meds constantly

Treating target symptoms in children with ADHD?

- Hyperactivity: Stimulants, clonidine, guanfacine, atomoxetine
- Sleep problems: Melatonin, clonidine, trazodone, mirtazepine
- Aggression/disruptive behavior: Clonidine, guanfacine, risperidone, carbamazepine, amantadine, divalproex, lithium, oxcarbazepine
- Anxiety: SSRI, benzodiazepines, hydroxyzine, buspirone
- Depressed mood: SSRI, bupropion
- Tics: guanfacine, clonidine, risperidone, aripiprazole, levitiracetam, topiramate

“Targeted combined therapy”
or
Pharmacodesperation!

“Thanks for the referral. I’ve started him on fluoxetine for his compulsive behavior, clonidine for his tics, risperidone for his aggression, trazodone to help him sleep, and 25 mg imipramine...for old time’s sake.”

