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# ADHD AND ITS COMORBIDITIES: APPROACH TO MANAGEMENT

**T**he categorical and relatively simple symptomatological core of ADHD occurs without comorbidities in approximately thirty percent of cases. The DSM 5 changes have assisted us in thinking a little differently about this disorder. We now see it as one of the neurodevelopmental disorders alongside Autism Spectrum Disorders (ASD), Tic disorders, Specific Learning Difficulties and Intellectual Disability. We expect evidence of symptomatology prior to age 12 years and can diagnose ADHD alongside ASD. The stimulants remain the intervention of choice and some practical tips on their use include:

- We always start with the lowest dose possible and adjust the dose according to clinical needs (for example, a decline in

academic performance) and not according to weight changes. The recommended dose of 1mg/kg/day is seldom required and a large majority of children respond to lower doses equivalent to approximately 0.5mg/kg/day. No child should feel that they have lost their spontaneity or feel rigid and inflexible. That is a clear indication that the dose is too high.

- Use Ritalin<sup>P</sup> in children under the age of 11 years and introduce Concerta<sup>P</sup> when children progress to grade 6 or 7 when the academic demands increase and their school day is longer. An 8 year old should not require 13 hours of stimulant cover unless their pathology is severe.

If a patient presents for evaluation with suspected or confirmed ADHD and all you look at is the ADHD without thinking

about comorbidities, you can miss disorders that require attention. Later in treatment, you may mistakenly believe that you have a patient with treatment-resistant ADHD. If you don't look for the comorbid learning disability or anxiety disorder, then you will not recognise that the reason that your patient is not getting better is due not to the fact that the ADHD medication itself is failing, but rather to the fact that your evaluation and treatment plan did not cover the comorbidities that are impacting the child's functioning. By adolescence, patients who have had the ADHD diagnosis for many years often present with a falloff in functioning in one or more areas (academic, behaviour, or social). This is a common way for a comorbidity to present in adolescence.

Frequently, a wide variety

of concurrent psychiatric disorders contribute to the psychopathological status of minors with ADHD. Overlapping psychiatric disorders are more likely to be the rule rather than the exception. The main disorders likely to co-occur with ADHD are: Oppositional Defiant Disorder (ODD) (50-60%), Conduct Disorder (CD) (20-50% in children and 40-50% in adolescents), Depression (16-26%), anxiety (10-40%), Bipolar Disorder (11-30%), Tic Disorders (20%), Obsessive Compulsive Disorder (6-15%) and Autism Spectrum Disorder (65-80%).

### CONDUCT DISORDER AND ODD

The likelihood of ODD and CD increases when ADHD has been untreated so it is imperative to maximise treatment of the ADHD and then you may see a decrease in the ODD/CD symptoms. Where symptoms persist then it is time to look at therapy as an add-on to medication. Group therapy to help them learn how to interact better with their peers and adults and/or family therapy to assist parents to learn how to consistently set and enforce a set of household rules for behaviour. Where there is extreme aggression we may want to add in low-dose risperidone<sup>P</sup> for containment and referral to a specialist would be appropriate. A review of the family system may necessitate a referral to a social services and their ROAR programme.

### ANXIETY DISORDERS AND OCD

Untreated ADHD can cause

anxiety and these minors often present with severe test anxiety and anxiety about getting assignments completed or about going to school in general. In these circumstances, treating the ADHD will resolve this particular anxiety.

However, minors who present with symptoms of anxiety that warrant a separate diagnosis of anxiety such as separation anxiety or generalised anxiety disorder, it is imperative to treat the anxiety disorder first before using stimulants. Stimulants will certainly aggravate the anxiety symptoms if they are untreated. Therapeutic intervention and two weeks of low-dose fluoxetine should be given before introducing the stimulant or, where anxiety is pervasive; one would consider using atomoxetine<sup>P</sup> in these cases. Adolescent females presenting for the first time with ADD symptoms and anxiety respond particularly well to atomoxetine<sup>P</sup> as first-line treatment.

OCD may also be aggravated by stimulants and therefore we prioritise the treatment of the OCD before initiating stimulants.

### DEPRESSION

Always ask a minor about feelings of sadness, feelings that they find difficult to endure, low mood, lack of motivation and energy and irritability. All of which would suggest a possible diagnosis of depression. Once again, stimulants will aggravate the mood symptoms

if they are untreated. For mild depression, consider a therapeutic intervention first but for moderate depression one may consider the use of fluoxetine for two weeks before introducing the low-dose stimulant.

### LEARNING DISABILITIES

Learning disabilities are common and tend to persist from childhood into adolescence. When we treat ADHD, we expect a trial of a stimulant medication to be followed by improvement in academic performance, but if academics do not improve, then a psychoeducational evaluation should be sought and a referral done to the education department to ascertain the appropriate school placement to meet remedial needs.

### SUBSTANCE USE DISORDERS

Untreated ADHD is a significant risk factor for substance abuse and ADHD treatment has been shown to decrease risk for substance abuse. This is interesting because parents are often hesitant to put their children on a controlled substance, thinking it will cause them to be an "addict." But research shows the opposite to be true. In addition, where ADHD has been untreated, the onset of experimentation is earlier in kids with ADHD. Treating the ADHD is a priority and referral to a substance abuse program with the assistance of a social worker needs to be done. Avoidance of the stimulants should be considered with regards to treatment options as there is likelihood for abuse of these medications. Consider atomoxetine in these contexts.

### TIC DISORDERS

The presence of mild motor tics is not a contra-indication for a trial of a stimulant. Stimulants may aggravate tics but it is important to be mindful that tics do wax and wane and deteriorate unpredictably. However, the presence of numerous motor and vocal tics would require treatment of the tics themselves with antipsychotics and a trial of atomoxetine and specialist management would be more appropriate.



## AUTISM SPECTRUM DISORDERS

Children on the ASD spectrum generally do not tolerate stimulants well and are prone to more side effects from most medications. A trial of very low-dose stimulants may be indicated but if it is not tolerated (increased irritability, agitation, emotional dysregulation) then a trial of atomoxetine can be considered. Often this, too, is not well tolerated and low-dose risperidone or clonidine is considered as alternatives. The contextual and multi-modal therapeutic support of the patient is crucial to managing symptoms and the correct remedial environment will also go a long way in supporting the child and their symptomatology.

## BIPOLAR MOOD DISORDER

It is important to ask about a family history of mood or bipolar disorder. There are many overlapping symptoms between the two conditions but there are characteristics that can help distinguish between the two. First, check for grandiosity and racing thoughts and expansive

explanations of mood which are difficult to interrupt. Look for extremes in behaviour and mood. When a parent's main complaint is about persistent negative mood or anger, this is more suggestive of a bipolar type picture. A prominent cycling pattern in mood, once again, suggests a predominant bipolar mood difficulty. Research indicates that as long as the bipolar disorder is treated and stabilised first, you can safely add in stimulant medication but will need to start at a lower dose than usual and monitor for changes in mood symptoms as well as ADHD symptoms.

## WHEN TO REFER?

Refer for specialist psychiatric intervention when your first two interventions have failed. For example, if you have treated the depression first and done a trial of ADHD meds but there is no improvement or when you have treated the ADHD and referred the ODD child and family for therapeutic intervention but symptoms persist or deteriorate. Refer when there is severe intolerance or side effects to the ADHD medication beyond what

one would expect (appetite loss in stimulants or nausea with atomoxetine). Refer when you are out of your depth and cannot get a clear picture as to the range of psychopathology presenting to you. Refer to a psychologist if a therapeutic intervention is indicated especially if a family needs support. Remember that the best outcome for most psychiatric pathology of moderate severity is the combination of medication and therapy. Refer to a social worker if social factors are interfering significantly in the child's ability to achieve recovery. Often discussing a case with a colleague or specialist may help to shed some light on a tricky clinical situation. Always remember that if you don't ask about comorbidities, then you won't be able to treat them. Always ask about the various factors critical to any presentation of a child with behavioural difficulties: school, family, friends, bullying and any other stressors. Psychosocial factors will always impact on a clinical presentation and may need additional management Medscape. 2019; October 16. **MHM**

*References available upon request*



AUTISM  
SPECTRUM  
DISORDER