

# ATTENTION DEFICIT HYPERACTIVITY DISORDER –

## COMORBIDITIES

---

---

---

---

---

---

---

The comorbidity of ADHD with other disorders is between 60% and 80%

The most commonly comorbid disorder that occur alongside ADHD are:

- Oppositional Defiant Disorder
- Depression
- Anxiety Disorders
- Bipolar Disorder
- Conduct Disorder
- Substance Abuse
- Tic Disorders
- OCD (rare, 3-4% of adult cases)
- Sleep Disorders

---

---

---

---

---

---

---

## Oppositional Defiant Disorder

Oppositional Defiant Disorder (ODD) consists of a pattern of negativistic, hostile, and defiant behavior lasting at least six months, during which four (or more) of the following behaviors are present:

---

---

---

---

---

---

---

- often loses temper
- often argues with others
- often actively defies or refuses to comply with requests or rules
- often deliberately annoys people

---

---

---

---

---

---

---

- often blames others for his/hers mistakes or misbehavior
- is often touchy or easily annoyed by others
- is often angry and resentful
- is often spiteful or vindictive

---

---

---

---

---

---

---

### **Oppositional Defiant Disorder- Treatment:**

- Both stimulants and ATX reduce it markedly
- Often requires adjunctive parent training in behaviour management methods
  - 60-75% successful for children
  - 25-35% treatment response after 13+ yrs. of age

---

---

---

---

---

---

---

- May need to add problem-solving communication training after age 14 years
- Severely explosive anger may require use of atypical antipsychotics or antihypertensives

---

---

---

---

---

---

---

### Conduct Disorder

The DSM-IV categorizes Conduct Disorder behaviors into four main groups:

- aggressive conduct that threatens or causes physical harm to other people or animals
- non-aggressive conduct that causes propriety loss or damage

---

---

---

---

---

---

---

- deceitfulness or theft
- serious violations of rules

---

---

---

---

---

---

---

## AGGRESSION TO PEOPLE AND ANIMALS

- bullying, threatening or intimidating others
- initiating physical fights
- using a weapon that can cause serious physical harm to others

---

---

---

---

---

---

---

- being physical cruel to people
- being physical cruel to animals
- stealing while confronting a victim
- forcing someone into sexual activity

---

---

---

---

---

---

---

## DESTRUCTION OF PROPERTY

- fire setting with the intention of causing serious damage
- destroying others' property (other than by fire setting)

---

---

---

---

---

---

---

### DECEITFULNESS OR THEFT

- breaking into someone else's house, building
- lying to obtain goods or favours or to avoid obligations
- stealing items of nontrivial value without confronting a victim

---

---

---

---

---

---

---

### SERIOUS VIOLATIONS OF RULES

- staying out at night despite parental prohibitions, beginning before age 13 years
- running away from home overnight at least twice
- is often truant from school, beginning before age 13 years

---

---

---

---

---

---

---

### Subtypes of Conduct Disorder

The first, childhood-onset type, is defined by the onset of one criterion of conduct disorder before age 10. Male frequently display physical aggression; they usually have disturbed peer relationships, and may have had oppositional defiant disorder during early childhood.

---

---

---

---

---

---

---

They are more likely to have persistent conduct disorder, and are more likely to develop adult antisocial personality disorder than those with the adolescent-onset type.

---

---

---

---

---

---

---

The second, the adolescent-onset type, is defined by the absence of conduct disorder prior to age 10. These individuals tend to have more normal peer relationships, and are less likely to have persistent conduct disorders or to develop adult antisocial personality disorder.

---

---

---

---

---

---

---

#### Severity of symptoms

- Mild
- Moderate
- Severe

---

---

---

---

---

---

---

### Comorbidities and associated disorders

- Attention Deficit Hyperactivity Disorder
- Conduct Disorder
- Oppositional Defiant Disorder
- Learning Difficulties

---

---

---

---

---

---

---

- Mood Disorders
- Depressive symptoms
- Anxiety Disorders
- Communication Disorders
- Tourettes Disorder

---

---

---

---

---

---

---

### Prevalence of Conduct Disorder

According to research cited in Phelps & McClintock (1994), 6% of children.

---

---

---

---

---

---

---

### Course of Conduct Disorder

1. The onset of conduct disorder may occur as early as age 5 or 6
2. more usually occurs in late childhood or early adolescence
3. onset after the age of 16 years

---

---

---

---

---

---

---

Age of onset of ODD seems to be associated with the development of severe problems later in life.

Studies suggest that less than 50% of the most severe cases become antisocial as adults.

---

---

---

---

---

---

---

There are certain risk factors that have been shown to contribute to the continuation of the disorder.

- 1) an early age of onset
- 2) the spread of antisocial behaviours across settings

---

---

---

---

---

---

---



- 3) the frequency and intensity of antisocial behaviours
- 4) the forms that the antisocial behaviours take
- 5) also particular parent and family characteristics

---

---

---

---

---

---

---

### Treatment

- Stimulants and ATX reduce aggressive behaviour and antisocial acts but stimulants may work more rapidly to gain case control
- Mood stabilizers, atypicals, or antihypertensives may be needed for aggressive/explosive cases

---

---

---

---

---

---

---

- Parent and family interventions
- Avoid group treatment formats due to deviancy training
- Involvement of juvenile justice agencies likely

---

---

---

---

---

---

---

### Depression

Depression may be a reaction to environmental stressors associated with having ADHD.

Depression is occurring in response to ADHD and will likely decrease when the ADHD symptoms are treated.

---

---

---

---

---

---

---

Instances in which depression may run in the family and be linked to biological/genetic causes, diagnosis and specific treatment for symptoms of depression would be more appropriate.

Distinguishing between the emotional complications of attention deficit disorder and a separate depressive disorder may be very difficult.

---

---

---

---

---

---

---

Mood disorders are often present in adults with ADHD with reported rates of comorbidity between 53% and 59% and MDD has been shown to be present in 10% to 55% of adults with ADHD.

---

---

---

---

---

---

---

## Treatment

Major Depressive Disorder

Use ADHD drug first if:

- ADHD is chief complaint
- ADHD symptoms are more disabling

---

---

---

---

---

---

---

■ MDD is mild: No current functional impairment from depression

■ Neuro - vegetative signs are mild

■ ADHD symptoms clearly preceded MDD symptoms

---

---

---

---

---

---

---

Start with Antidepressant first if:

- History of non-response to ADHD drugs
- Prominent neuro - vegetative signs or health is compromised
- MDD symptoms are chief present complaint

---

---

---

---

---

---

---

- ADHD symptoms are mild, late onset, or coincident with MDD onset.

- Suicidal/Psychotic

---

---

---

---

---

---

---

#### More on MDD

- May require mixed ADHD/SSRI therapy
- May need cognitive-behavioural therapy

---

---

---

---

---

---

---

#### Anxiety Disorders

Anxiety symptoms are generally expressed in four domains:

- cognitive
- affective
- physical
- behavioral

---

---

---

---

---

---

---

Childhood anxiety disorders are often not suspected in an overactive child, just as ADHD is often not assessed in inhibited children.

Approximately 25% of individuals with ADHD also have Anxiety disorders.

---

---

---

---

---

---

---

Common symptoms of anxiety include:

- unpredictable mood swings
- excessive irritability
- frequent angry outbursts
- a noticeable lack of energy at times
- low self-esteem

---

---

---

---

---

---

---

Other symptoms include:

- frequent school absenteeism
- somatic (physical) complaints
- unwillingness to attempt new tasks
- a sense of resignation regarding their decreased ability to perform various tasks

---

---

---

---

---

---

---

Stimulant medications, while helpful for ADHD symptoms, may actually worsen the symptoms of true anxiety disorders.

---

---

---

---

---

---

---

Treatment:

- behavioural therapies
- social skills training
- stimulants can exacerbate anxiety

---

---

---

---

---

---

---

- studies are conflicting
- Atomoxetine (ATX) reduces anxiety
- family counseling

---

---

---

---

---

---

---

### Substance Use Disorders

Juveniles with ADHD are at increased risk for cigarette smoking and substance abuse during adolescence.

ADHD youth disproportionately become involved with cigarettes, alcohol , and then drugs.

---

---

---

---

---

---

---

Individuals with ADHD, independent of comorbidity, tend to maintain their addiction longer compared with their non-ADHD peers.

---

---

---

---

---

---

---

When someone is alcoholic, cocaine user or addicted to hashish, we tend to deal so much with the problems that the use causes that we rarely examine the reason for which this addictive substance becomes necessary for the user.

---

---

---

---

---

---

---

Users who really suffer from ADHD.,  
it's particularly necessary to treat  
ADHD as much as their addiction.

Treating ADHD reduces the possibility  
for the individual to return to drug  
abuse.

---

---

---

---

---

---

---

#### The distinction between ADHD and Bipolar disorder has been easy to make

- | ■ Bipolar Disorder                    | ■ ADHD   |
|---------------------------------------|--|
| ➤ euphoria                            | ➤ disorganised and off -task activity                      |
| ➤ grandiosity                         | ➤ lack of sleep  |
| ➤ cycling course                      | ➤ exhausted during the day                                 |
| ➤ The goal - directed over - activity | ➤ thoughts are often described as 'on the go' all the time |

---

---

---

---

---

---

---

#### Bipolar Disorder

About ½ of boys and ¼ of girls with  
bipolar disorder also meet the criteria  
for ADHD.

---

---

---

---

---

---

---



Children and adolescents with bipolar disorder often show impulsive inattention and hyperactive behaviour, extremely strong feelings, an overbearing manner, irritability, and difficulty waking up in the morning.

---

---

---

---

---

---

---

The rates of bipolar disorder in children with ADHD vary widely and depend in part on how the diagnosis of bipolar disorder is made.

---

---

---

---

---

---

---

In samples of children with well-characterized bipolar disorder, the rate of ADHD has been reported to be as low as 4% and as high as 38%.

The lifetime rate of ADHD in adult patients with bipolar disorder has been estimated to be 10%.

---

---

---

---

---

---

---

With respect to treating comorbid ADHD and bipolar disorder, several studies have shown that concomitant treatment with a mood stabilizer (such as divalproex sodium) and an approved ADHD medication (such as MAS or atomoxetine) can be effective for treating symptoms of both disorders and reducing impairment.

---

---

---

---

---

---

---

Regardless, clinicians need to be aware that the conditions can co-occur and should carefully consider pharmacologic options for patients presenting with both disorders.

---

---

---

---

---

---

---

### **Treating Childhood Bipolar Disorder**

- 1.Requires poly-pharmaceutical management for long term (mood stabilizers, atypicals, anticonvulsants likely)
- 2.Often require periodic hospitalization for safety (suicidality) and stabilization

---

---

---

---

---

---

---

3. Medical management of bipolarity should be done first before managing ADHD symptoms with ADHD drugs

4. Consider all-reward or non-confrontational parent training programs

5. Interventions are more likely to be focused on parental coping with explosive episodes rather than remediation of disruptive behaviour

6. Counsel parents on stress management; ADHD/BPD cases have highest rates of physical abuse and PTSD of all ADHD cases

7. Special education (ED) programs are likely

8. Adolescent or adult SUDs are likely and require management

### Specific learning difficulties

- Dysgrafia
- Dyspraxia
- Dyscalculia
- Dyslexia

---

---

---

---

---

---

---

Thank you for your attention!

Dr. George Dermatis  
ADHD-EUROPE Scientific Advisor

[gdermatis@gmail.com](mailto:gdermatis@gmail.com)

---

---

---

---

---

---

---