

AMS-MOH CLINICAL PRACTICE GUIDELINES 1/2014

Attention Deficit Hyperactivity Disorder



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Executive summary of recommendations

Details of recommendations can be found in the main text at the pages indicated.

Definition and diagnostic classification

B A diagnosis of attention deficit hyperactivity disorder should be made through a thorough clinical assessment, which should include an interview with the parent or significant caregiver of the child (pg 12).

Grade B, Level 2⁺⁺

B When diagnosing attention deficit hyperactivity disorder, in addition to information from interviews with parents or caregivers, information from another adult who has interacted with the child in another setting (e.g. school teachers) should also be obtained (pg 12).

Grade B, Level 2⁺⁺

B Before diagnosing attention deficit hyperactivity disorder (ADHD), a careful evaluation to exclude psychiatric or medical conditions which can account for ADHD-like symptoms should be performed (pg 12).

Grade B, Level 2⁺⁺

B Attention deficit hyperactivity disorder is a diagnosis that should be considered when a pre-schooler presents with disruptive behaviour (pg 13).

Grade B, Level 2⁺⁺

C The clinician should assess a child diagnosed with attention deficit hyperactivity disorder for co-morbid conditions (pg 13).

Grade C, Level 2⁺

C If there is a suspected learning disorder, appropriate psycho-educational or speech and language assessments should be sought from the appropriate specialists (pg 13).

Grade C, Level 2⁺

A There is no need for investigations such as thyroid function test, lead level or brain imaging to be done when assessing a child for attention deficit hyperactivity disorder, unless there is another medical indication (pg 14).

Grade A, Level 1⁺

A Electroencephalogram is not recommended as a diagnostic tool for attention deficit hyperactivity disorder in clinical practice (pg 15).

Grade A, Level 1⁺

Overview of treatment for ADHD

D Clinicians who treat adolescents with attention deficit hyperactivity disorder should plan for the transition to adult health services in advance, discuss this with the patients and their families, and ensure that they can continue to receive care (pg 17).

Grade D, Level 4

Psychosocial/alternative/complementary interventions

B After diagnosis, doctors should provide appropriate education about attention deficit hyperactivity disorder to children, families and teachers (pg 18).

Grade B, Level 1+

A Doctors should consider educating parents of children with attention deficit hyperactivity disorder about behaviour management strategies, or refer them to professionals who can do so [e.g. psychologists] (pg 19).

Grade A, Level 1++

B Parent training should be offered for parents of pre-school children with attention deficit hyperactivity disorder (pg 20).

Grade B, Level 1+

B Doctors should consider referring parents of children and adolescents with attention deficit hyperactivity disorder for parent training programmes offered within the community, particularly when negative parenting practices are identified (pg 20).

Grade B, Level 1+

D During the delivery of parent training, the professional should consider the use of behaviour management strategies which are more likely to be acceptable to the parents, based on an understanding of their cultural background (pg 21).

Grade D, Level 3

GPP Family therapy may be considered for the family of a child or adolescent with attention deficit hyperactivity disorder if severe disruption in relationships within the family is evident (pg 21).

GPP

C Academic interventions should be considered for the child with attention deficit hyperactivity disorder and should be made in consultation with educational professionals who work closely with the child in the learning or school context. [Guidelines for communications between the physician and the child's school are provided in Annex 5.] (pg 22).

Grade C, Level 2+

GPP Parents and caregivers should be encouraged to actively share information about the child's attention deficit hyperactivity disorder condition with his school, and collaborate with professionals and teachers in preparing the child for the educational setting (pg 24).

GPP

B Social skills training alone is not recommended for the management of attention deficit hyperactivity disorder (pg 25).

Grade B, Level 1*

B Cognitive-behavioural therapy alone is not recommended for the management of attention deficit hyperactivity disorder (pg 25).

Grade B, Level 1*

B There is no clear evidence for food additives and sugars to be related to attention deficit hyperactivity disorder. Parents and children should be advised to control food items containing additives or high sugar content that have been observed to consistently provoke physical or behavioural reactions (pg 26).

Grade B, Level 1*

C A restrictive elimination diet is not recommended for the management of attention deficit hyperactivity disorder (pg 27).

Grade C, Level 2**

B Omega-3 supplementation may be used as an adjunctive treatment for attention deficit hyperactivity disorder (pg 27).

Grade B, Level 1*

B Neurofeedback should not be used alone for the treatment of attention deficit hyperactivity disorder (pg 29).

Grade B, Level 1*

A Cognitive remediation alone is not recommended for the treatment of attention deficit hyperactivity disorder with significant impairment (pg 29).

Grade A, Level 1*

D A referral to an Occupational Therapist may be considered for children with sensory processing or motor skill deficits in addition to attention deficit hyperactivity disorder (pg 30).

Grade D, Level 3

Pharmacological treatment

A When medication is considered for the treatment of attention deficit hyperactivity disorder, methylphenidate should be considered first (pg 32).

Grade A, Level 1+

B Methylphenidate may be used for long term treatment of attention deficit hyperactivity disorder symptoms, although the benefits of treatment should be reviewed regularly (pg 32).

Grade B, Level 1+

B Drug holidays during treatment with methylphenidate may be considered in order to limit adverse effects. Attention deficit hyperactivity disorder symptoms and impairment during the non-medication days should be monitored (pg 33).

Grade B, Level 1+

A The height, weight and body-mass-index (BMI) of children receiving treatment with methylphenidate should be regularly monitored (pg 33).

Grade A, Level 1++

D The height, weight and body-mass-index (BMI) of children receiving treatment with methylphenidate should be monitored every 6 months. If there is concern about slowing of growth rate, the need for continued medication use should be reviewed and jointly decided with parents, and there may be a need to evaluate for other medical reasons explaining this (pg 33).

Grade D, Level 4

B During treatment with methylphenidate, start at a low dose and slowly titrate upwards according to the child's response, or adjust the timing of medication, to minimise short-term adverse effects (pg 34).

Grade B, Level 1+

C A careful personal and family history of cardiovascular disease should be taken before starting medication treatment for attention deficit hyperactivity disorder. Children with pre-existing cardiac problems should be referred to a cardiologist for evaluation before treatment with methylphenidate or atomoxetine is initiated (pg 34).

Grade C, Level 2*

A Methylphenidate may be used to treat attention deficit hyperactivity disorder in children with comorbid tic disorder but treatment should be stopped if the tics worsen following treatment (pg 35).

Grade A, Level 1*

B The use of methylphenidate should be considered when treating attention deficit hyperactivity disorder in the presence of co-morbid disruptive behavioural disorder (pg 35).

Grade B, Level 1*

B The use of an extended-release methylphenidate instead of immediate-release methylphenidate should be considered if there is concern about medication abuse. Medication use by these patients should be carefully monitored (pg 35).

Grade B, Level 1*

A Methylphenidate may be considered for the treatment of attention deficit hyperactivity disorder in individuals who have also been diagnosed with autistic spectrum disorder. Care should be taken to watch for side effects (pg 36).

Grade A, Level 1*

A Atomoxetine may be used for the treatment of attention deficit hyperactivity disorder symptoms when there is increased risk with methylphenidate use [e.g. high risk of abuse or diversion] (pg 37).

Grade A, Level 1*

A During treatment with atomoxetine, there should be periodic monitoring of growth (height and weight) and mental state (suicidal thinking). If there is concern about slowing of growth rate, the need for continued medication use should be reviewed and jointly decided with parents, and there may be a need to evaluate for other medical reasons explaining this (pg 37).

Grade A, Level 1**

D The height, weight and body-mass-index (BMI) of children receiving treatment with atomoxetine should be monitored every 6 months (pg 38).

Grade D, Level 4

B Atomoxetine may be used as first line treatment when there is comorbid attention deficit hyperactivity disorder and tic disorder (pg 38).

Grade B, Level 1*

C The combination of methylphenidate and atomoxetine should not be used for the treatment of attention deficit hyperactivity disorder symptoms (pg 40).

Grade C, Level 2*

A To improve treatment adherence, treatment should be individualised for each patient with attention deficit hyperactivity disorder, and the parents' and their child's preferences should be considered (pg 41).

Grade A, Level 1*

A The use of methylphenidate or atomoxetine in pre-schoolers should be considered only if psychosocial interventions have failed. Care should be taken to regularly assess response and monitor for side effects, so as to decide if medication should continue to be administered (pg 41).

Grade A, Level 1**

Cost-effectiveness issues

A Although medication is a cost-effective treatment for attention deficit hyperactivity disorder (ADHD), treatment for ADHD should be individualised and other factors (e.g. presence of co-morbidity) should be considered before initiating medications (pg 42).

Grade A, Level 1**

Levels of evidence and grades of recommendation

Levels of evidence

Level	Type of Evidence
1 ⁺⁺	High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias
1 ⁺	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1 ⁻	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2 ⁺⁺	High quality systematic reviews of case control or cohort studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2 ⁺	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2 ⁻	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case reports, case series
4	Expert opinion

Grades of recommendation

Grade	Recommendation
A	At least one meta-analysis, systematic review of RCTs, or RCT rated as 1 ⁺⁺ and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1 ⁺ , directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2 ⁺⁺ , directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1 ⁺⁺ or 1 ⁺
C	A body of evidence including studies rated as 2 ⁺ , directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2 ⁺⁺
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2 ⁺
GPP (good practice points)	Recommended best practice based on the clinical experience of the guideline development group.