



NATIONAL CLINICAL GUIDELINE FOR ASSESSMENT AND TREATMENT OF ADHD IN CHILDREN AND YOUNG PEOPLE

Quick guide

It is good practice to use a standardised rating scale as part of the diagnostic assessment for ADHD in children and young people aged 6-18.

Good practice (consensus)

It was not considered necessary to update the recommendation in 2018.

It is good practice to use professional observation of children and young people aged 6-12 years in their environment as part of the diagnostic assessment for ADHD. This applies in particular in case of differential diagnostic considerations regarding attachment disorder or behavioural disorder.

Good practice (consensus)

It was not considered necessary to update the recommendation in 2018.

Professional observers are independent persons who have in-depth knowledge of both children's normal behaviour and development and of ADHD, and who take a multidisciplinary approach to ADHD in their daily work. The observation must be geared to the specific problem with the child in question.

Polyunsaturated fatty-acid supplements should only be used after careful consideration to relieve core symptoms in children and young people aged 6-18 with ADHD. The intervention does not appear to have any effect, and the scope of gastrointestinal side effects is uncertain.

It is recommended that young people with ADHD follow the Danish Veterinary and Food Administration's dietary advice – like all other children and young people.

Weak recommendation **AGAINST**

The recommendation was updated without changes in 2018

Elimination of dyes from the diet should only be used after careful consideration for relieving core symptoms in children and young people aged 6-18 with ADHD. The intervention does not appear to have any effect.

It is recommended that young people with ADHD follow the Danish Veterinary and Food Administration's dietary advice – like all other children and young people.

Weak recommendation **AGAINST**

It was not considered necessary to update the recommendation in 2018.



Sugar should not be eliminated from the diet for children and young people aged 6-18 years with ADHD.

It is recommended that young people with ADHD follow the Danish Veterinary and Food Administration's dietary advice – like all other children and young people.

Strong recommendation **AGAINST**

It was not considered necessary to update the recommendation in 2018.

Computer-based cognitive training should only after careful consideration be used in children and young people aged 6-18 with ADHD.

Weak recommendation **AGAINST**

The recommendation was updated and changed in 2018.

Consider use of social skills training for children and young people aged 6-18 with ADHD.

Weak recommendation

The recommendation was updated without changes in 2018

Offer parent training programmes to parents of children and young people aged 3-18 with ADHD.

Strong recommendation

The recommendation has been updated in 2021

In this context, parent training means an initiative aimed at parents as primary recipients thereof. The parent training programme must be manualised and structured, and must be specially adapted to ADHD. The programmes must include teaching and present concrete, action-oriented strategies and exercises aimed at increasing parental understanding and mastery of having a child with ADHD. The programmes may also contain training elements aimed at understanding and handling additional problems such as difficulties sleeping, outward reactive behaviour, anxiety and disturbed sensory processing. The programmes can be delivered individually and on a group basis. If the programme is delivered as online treatment, therapist support should be included.



It is good practice to offer supervised and manualised sensory integration therapy in addition to usual care for children and young people with ADHD and moderate to severe sensory integration disorders.

Good practice (consensus)

New recommendation added in 2020

The working group stresses that the recommendation is aimed at the subgroup of children and young people with ADHD who also have sensory integration disorders. ADHD alone is thus not an indication for initiation of this treatment. For example, the presence of moderate to severe sensory integration disorders can be defined as a T-score > 70 on Sensory Processing Measure, equal to Definite Dysfunction.

The elements of sensory integration therapy can generally be based on the treatment principles described in 'Sensory Integration Theory and Practice' 3rd edition by Anita Bundy and Shelley Lane or 'Sanseintegration hos børn' (Sense Integration in Children), and it can be planned so that it is targeted at the child's functional level and well-being in everyday life.

It is good practice to offer a weighted blanket to children and young people with ADHD and dyssomnia where sleep hygiene do not have a sufficient effect.

Good practice (consensus)

New recommendation added in 2020

In this context, dyssomnia can be understood as onset of sleep > 30 min. after the child/young person has gone to bed and the light has been switched off, with a frequency of min. four out of seven days and with a duration of approximately three months. The working group finds that sleep hygiene measures should be tested for a minimum period of four weeks before a weighted blanket is tried. Sleep hygiene measures to be tested before a weighted blanket is tried have been described in the treatment section.

The working group finds that a weighted blanket must be tried for minimum four weeks before it is assessed whether the desired effect is achieved.

Ball or chain blankets should be CE marked in accordance with medical devices class 1.

Consider offering cognitive behavioural therapy for ADHD to children and young people with ADHD aged 6-18 with and without comorbidity.

Weak recommendation

New recommendation added in 2020

Cognitive behavioural therapy may be considered when it is medically assessed that the child/young person can follow the treatment and benefit from it. The working group finds that many children/young people who want more insight into their own condition and/or who want to learn strategies for mastering the cognitive and emotional aspects of ADHD will benefit from and have a preference for receiving this intervention.

The therapy must be targeted at the child's age and the special difficulties associated with having ADHD and can be offered individually or as group-based therapy.



Offer methylphenidate to children and young people with ADHD who are displaying a major functional impairment and in whom psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Strong recommendation

Recommendation added in 2018

It must be emphasised that the recommendation in question is based on a positive clinical effect having been demonstrated within a very limited period of treatment. All the randomised trials included are of a short duration (\leq six months), and, on the basis of the studies included, it is therefore not possible to say anything about the long-term effects on ADHD core symptoms and long-term adverse reactions. Based on the sparse reporting in the studies included, it is also uncertain whether methylphenidate causes serious adverse reactions. There is a need for research that explores the consequences of long-term treatment with methylphenidate.

The degree of impairment must be assessed on the basis of a thorough clinical assessment and the medical history. The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.

If the diagnosis is certain and the disorder significant, it may in some cases be relevant to choose to try out pharmacological treatment in parallel with non-pharmacological treatment.

Consider offering methylphenidate to children and young people with ADHD who are not displaying any substantial functional impairment, and where psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Weak recommendation

Recommendation added in 2018

Even if there is no substantial functional impairment, there may still be a need for medical treatment in individual patients based on a different symptom load. The reason for the weak recommendation for this patient group is that the choice of medical treatment depends, to a greater extent, on an individual assessment of the individual patient's symptom load. Thus it is not certain that this form of treatment is optimal for all patients not displaying any substantial functional impairment, but it may be deemed helpful for some patients.

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The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.



Offer atomoxetine to children and young people with ADHD who are displaying a major functional impairment and in whom psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Strong recommendation

Recommendation added in 2018

It must be emphasised that the recommendation in question is based on a positive clinical effect having been demonstrated within a very limited period of treatment. All the included randomised trials are of a short duration (2-18 weeks), and it is therefore not possible to say anything about long-term effects and long-term adverse reactions. Based on the sparse reporting in the studies included, it is uncertain whether atomoxetine causes serious adverse reactions. There is a need for research that examines the consequences of long-term treatment with atomoxetine.

The degree of impairment must be assessed on the basis of a thorough clinical assessment and the medical history. The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.

If the diagnosis is certain and the disorder significant, it may in some cases be relevant to choose to try out pharmacological treatment in parallel with non-pharmacological treatment.

Consider offering atomoxetine to children and young people with ADHD who are not displaying any substantial functional impairment, and in whom psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Weak recommendation

Recommendation added in 2018

Even if there is no substantial functional impairment, there may still be a need for treatment in individual patients based on a different symptom load. The reason for the weak recommendation for this patient group is that the choice of treatment depends, to a greater extent, on an individual assessment of the individual patient's symptom load in relation to the choice of treatment. It is not certain that this form of treatment is optimal for all patients not displaying any substantial functional impairment, but it may be deemed helpful for some patients.

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The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.



Offer lisdexamfetamine/dexamphetamine to children and young people with ADHD who are displaying substantial functional impairment, and in whom psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Strong recommendation

Recommendation added in 2018

It must be emphasised that the recommendation in question is based on a positive clinical effect having been demonstrated within a very limited period of treatment. All the included randomised trials are of a short duration (14-63 days), and it is therefore not possible to say anything about long-term effects and long-term adverse reactions. Based on the sparse reporting in the studies included, it is uncertain whether lisdexamfetamine/dexamphetamine causes serious adverse reactions. There is a need for research that explores the consequences of long-term treatment with lisdexamfetamine/dexamphetamine.

The degree of impairment must be assessed on the basis of a thorough clinical assessment and the medical history. The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.

If the diagnosis is certain and the disorder significant, it may in some cases be relevant to choose to try out pharmacological treatment in parallel with non-pharmacological treatment.

Consider offering lisdexamfetamine/dexamphetamine to children and young people with ADHD who are not displaying any substantial functional impairment, and in whom psychological and/or educational initiatives have not had a sufficient effect. The effect and occurrence of adverse reactions should be monitored.

Weak recommendation

Recommendation added in 2018

Even if there is no substantial functional impairment, there may still be a need for treatment in individual patients based on a different symptom load. The reason for the weak recommendation for this patient group is that the choice of treatment depends, to a greater extent, on an individual assessment of the individual patient's symptom load in relation to the choice of treatment. It is not certain that this form of treatment is optimal for all patients who are not displaying any substantial functional impairment, but it may be deemed to helpful for some patients.

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The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.



As there is no immediate difference in clinical effect between methylphenidate and atomoxetine, there is no basis for recommending one product over the other. The choice will depend on an individual evaluation of the individual patient.

Weak recommendation

Recommendation added in 2018

The treating physician should continuously assess the effect of treatment, adverse reactions and patient compliance, and make a decision about the continued course of treatment on this basis.

As there is no immediate difference in terms of clinical effect and profile of adverse drug reactions between atomoxetine and lisdexamfetamine/dexamphetamine, there is no basis for recommending one product over the other. The choice will depend on an individual evaluation of the individual patient.

Weak recommendation

Recommendation added in 2018

The literature search found no evidence for the use of atomoxetine compared with lisdexamfetamine. However, the effect and profile of adverse drug reactions of dexamphetamine can be equated with lisdexamfetamine, and the recommendation therefore concerns the use of both dexamphetamine and lisdexamfetamine.

The treating physician should continuously assess the effect of the treatment, adverse reactions and patient compliance, and make a decision about continued treatment on this basis.

Consider offering guanfacine or atomoxetine to children and young people aged 6-18 with ADHD with and without comorbidity, where central stimulants are not tolerated, is not suitable or have been shown to be ineffective.

Weak recommendation

New recommendation added in 2020

As there are no significant differences in either clinical effect or adverse effects between guanfacine and atomoxetine, there is no basis for recommending one preparation over the other. The choice will depend on an individual assessment of the individual patient.

Pharmacological treatment of children and young people with ADHD must be provided in accordance with the Danish Health Authority's guidance on pharmacological treatment of children and young people with mental disorders.

On commencement of treatment, the specialist must establish a treatment plan, with checks after each dose adjustment, to assess effect, adverse reactions, and how well the patient complies with the treatment. On this basis, the specialist must make a decision on the continued treatment.

For pharmacological treatment with both guanfacine and atomoxetine, they must be used as part of a comprehensive treatment programme for ADHD, which typically includes psychoeducation, pedagogical and social treatment.



Consider offering melatonin to children and young people with dyssomnia and ADHD aged 6-18 where sleep hygiene measures do not have a sufficient effect.

Weak recommendation

New recommendation added in 2020

Dyssomnia in connection with onset of sleep can be defined as onset of sleep > 30 min. after the child/young person has gone to bed and the light has been switched off, with a frequency of min. four out of seven days and with a duration of approximately three months. The working group has found that sleep hygiene measures should be tested for a minimum period of four weeks before melatonin is tried. Sleep hygiene measures to be tested before melatonin treatment is commenced have been described in the treatment section.

Melatonin treatment for children and young people with ADHD is off-label treatment and must be provided in accordance with the Danish Health Authority's guidance on pharmacological treatment of children and young people with mental disorders. The patient must be informed about the treatment, including the evidence on which the treatment is based, about the adverse reactions that may occur and that it is a treatment outside the approved indication and thus cannot be found in the package leaflet. The physician must keep a record of indications, the reasons for the treatment and the informed consent. To be ingested 0.5-1 hour before bedtime. After minimum three months' treatment, the physician should evaluate the treatment efficiency and consider discontinuation if no clinically relevant treatment efficiency is seen.

Consider offering treatment with CNS stimulants to children and adolescents with ADHD in active abuse rather than non-CNS treatment, as the treatment may have a beneficial effect on functional level and has a rapid effect.

Weak recommendation

New recommendation added in 2020

The working group finds that most young people with ADHD and substance abuse, as well as their parents, would prefer treatment with CNS stimulants in order to increase their functional level as quickly as possible, and thus render likely a possible need for self-medication, i.e. the impulse to alleviate their own symptoms and difficulties with substance abuse, and potentially increase the young person's willingness to undergo substance abuse treatment, which will be offered in parallel.

The course of treatment must follow the Danish Health Authority's guideline on pharmacological treatment of children and young people with mental disorders as well as prescription of dependence-producing medicinal products.

On commencement of treatment, the specialist must establish a treatment plan, with checks after each dose adjustment, to assess effect, adverse reactions, and how well the patient complies with the treatment. On this basis, the specialist must make a decision on the continued treatment.



Pausing the pharmacological treatment for core symptoms in children and young people aged 6-18 with ADHD should only be planned after careful consideration. Pauses increase the risk of recurrence. Every six months it is good practice to assess the effect, adverse events and patient compliance. A decision on continuation of treatment will be based on this assessment.

Weak recommendation **AGAINST**

It is good practice to assess the effect, adverse reactions and patient compliance every six months. A decision on continuation of treatment will be based on this assessment.

It was not considered necessary to update the recommendation in 2018.

The working group finds that in children and young people undergoing pharmacological treatment of ADHD, pauses may be justified in the event of adverse reactions, but they should not be planned in advance. The working group thus finds that the Danish Health Authority's guidance on medicinal treatment of children and young people with mental disorders is still relevant.

It is good practice to combine pharmacological treatment with a psychosocial intervention in order to relieve symptoms other than core symptoms, e.g. behavioural disorders, in children and young people aged 6-18 with ADHD. However, combination therapy does not seem to relieve core symptoms in children and young people aged 6-18 with ADHD any more effectively than pharmacological treatment alone.

Good practice (consensus)

It was not considered necessary to update the recommendation in 2018.



About the quick guide

This quick guide contains the key recommendations from the national clinical guideline for the assessment and treatment of ADHD in children and young people. The guideline was prepared under the auspices of the Danish Health Authority.

The guideline includes recommendations on both pharmacological and non-pharmacological treatment of children and young people with ADHD.

The national clinical guideline contains recommendations regarding selected parts of the field, and it cannot stand alone, but must be seen in conjunction with other guidelines, recommendations, process descriptions etc. in this field.

Further information at www.sst.dk

A full-length version of the national clinical guideline is available at the Danish Health Authority's website (www.sst.dk), including a detailed review of the underlying evidence for the recommendations.

About the national clinical guidelines

This national clinical guideline is one of the national clinical guidelines prepared by the Danish Health Authority in the period 2017-2020.

Further information about the choice of subjects, method and process is available at www.sst.dk
