

Assessment, diagnosis and interventions for autism spectrum disorders

Quick Reference Guide

June 2016

Scottish Intercollegiate Guidelines Network

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autism spectrum disorders**
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This Quick Reference Guide provides a summary of the main recommendations in
**SIGN 145 Assessment, diagnosis and interventions for
autism spectrum disorders.**

Recommendations **R** are worded to indicate the strength of the supporting evidence. Good practice points ✓ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: www.sign.ac.uk.

This QRG is also available as part of the SIGN Guidelines app.



DIAGNOSTIC CRITERIA

- R** All professionals involved in diagnosing ASD in children, young people or adults should consider using the current version of either ICD or DSM. The classification system used for diagnosis should be recorded in the patient's notes.

RECOGNITION, ASSESSMENT AND DIAGNOSIS

SCREENING

- R** Population screening for ASD is not recommended.

SURVEILLANCE

- R** As part of the core programme of child health surveillance, healthcare professionals can aid early identification of children requiring further assessment for ASD and other developmental disorders. Clinical assessment should incorporate a high level of vigilance for features suggestive of ASD, in the domains of social interaction and play, speech, language and communication difficulties and behaviour.
- R** Children under three years of age who have regression in language or social skills should be referred for assessment for ASD.
- R** Instruments may be used for information gathering, but they should not be used to make or rule out a referral for an assessment for ASD.

SECONDARY SCREENING

- ✓** The assessment of children and young people with developmental delay, emotional and behavioural problems, psychiatric disorders, impaired mental health or genetic syndromes should include surveillance for ASD as part of routine practice.
- ✓** Healthcare professionals should consider informing families that there is a substantial increased risk of ASD in siblings of affected children.
- ✓** For adults ASD should be considered as part of an assessment if they have developmental delay, failure to meet adult milestones (work, development of intimate relationships or independence from parents), emotional and behavioural problems, intellectual disability or genetic syndromes.

TIMING OF DIAGNOSIS

- R** ASD should be part of the differential diagnosis for preschool children displaying absence of age-appropriate developmental features, as typical ASD behaviours may not be obvious in this age group.
- ✓** Regardless of the findings of any earlier assessments, referral for further assessment for ASD should be considered at any age.

IDENTIFYING ADULTS FOR ASSESSMENT

- ✓** Healthcare professionals should be aware of indicators for ASD in adults presenting with other conditions.

INSTRUMENTS TO AID IDENTIFICATION OF ADULTS WITH ASD

- R** The use of the Autism Spectrum Quotient-10 instrument may be considered to help identify adults with possible ASD capable of self completing the instrument, who should be referred for assessment.

GENDER DIFFERENCES ACROSS THE AGE RANGES

- R** Healthcare professionals should consider that females with ASD may present with a different symptom profile and level of impairment than males with ASD.

METHODS OF ASSESSMENT

INITIAL ASSESSMENT

- ✓ If, on the basis of initial assessment, it is suspected that the individual may have ASD, they should be referred for specialist assessment.

SPECIALIST ASSESSMENT

- ✓ The use of different professional groups in the assessment process is recommended as it may identify different aspects of ASD and aid accurate diagnosis.
- R **A diagnostic assessment, alongside a profile of the individual's strengths and weaknesses, carried out by a multidisciplinary team which has the skills and experience to undertake the assessments, should be considered as the optimum approach for individuals suspected of having ASD.**
- ✓ Specialist assessment should involve a history-taking element, a clinical observation/assessment element, and the obtaining of wider contextual and functional information.
- ✓ Specialist assessment should be available for any individuals who need it. Specialist teams should assess if their service is being used equitably. Apparent inequalities should be investigated and addressed.
- ✓ An assessment of mental health needs, well-being and risk should be considered for all individuals with ASD presenting to any agency.

COMPONENTS OF SPECIALIST ASSESSMENT

- R **Healthcare professionals involved in specialist assessment should take an ASD-specific developmental history and should directly observe and assess the individual's social and communication skills and behaviour.**
- R **Consider the use of a structured instrument to assist information gathering in the assessment of an individual with possible ASD.**
- ✓ In adults, the developmental history may not be available, but could be sought from a parent, sibling, or any person who knew the individual well as a child. Diagnostic assessment should always be undertaken even in the absence of an informant for early developmental history.
- ✓ Information about individual's functioning outside the clinic setting, should routinely be obtained from as many available sources as is feasible.

INDIVIDUAL PROFILING

COMMUNICATION SKILLS

- R **All children and young people with ASD should have a comprehensive evaluation of their speech and language and communication skills, which should inform intervention.**
- ✓ Assessment of speech, language and communication may be indicated for adults with ASD particularly in the presence of intellectual disability.
- ✓ Healthcare professionals should note that an individual's level of comprehension may be at a lower developmental level than that suggested by their expressive language skills.

COGNITIVE, NEUROPSYCHOLOGICAL AND ADAPTIVE FUNCTIONING ASSESSMENT

- R **Individuals with ASD should be considered for assessment of intellectual, neuropsychological and adaptive functioning.**

MOTOR AND SENSORY SKILLS

- ✓ Sensory behaviours should be taken into account when profiling the needs of individuals with ASD.
- ✓ Occupational therapy and physiotherapy assessments should be considered where relevant.

CONDITIONS ASSOCIATED WITH ASD

- ✓ Healthcare professionals should recognise that children and young people with ASD may also have additional developmental disorders, medical problems or emotional difficulties/disorders and should have access to the same range of therapeutic interventions as any other child.
- R Healthcare professionals should be aware of the need to routinely check for coexisting problems in children and young people with ASD. Where necessary, detailed assessment should be carried out to accurately identify and manage coexisting problems.

BIOMEDICAL INVESTIGATIONS

- R Where clinically relevant, the need for the following should be reviewed for all individuals with ASD:
 - examination of physical status, with particular attention to neurological and dysmorphic features
 - chromosomal microarray
 - examination of audiological status
 - investigations to rule out recognised aetiologies of ASD (eg tuberous sclerosis).
- ✓ Advice on further testing should be sought from the local genetics service.

NON-PHARMACOLOGICAL INTERVENTIONS FOR CHILDREN AND YOUNG PEOPLE

PARENT-MEDIATED INTERVENTIONS

- ✓ Parent-mediated intervention programmes should be considered for children and young people of all ages who are affected by ASD, as they may help families interact with their child, promote development and increase parental satisfaction, empowerment and mental health.

COMMUNICATION INTERVENTIONS

- R Interventions to support communicative understanding and expression in individuals with ASD, such as the Picture Exchange Communication System and the use of environmental visual supports (eg in the form of pictures or objects), should be considered.
- ✓ Choice of interventions to support communication in children and young people with ASD should be informed by effective assessment.

INTERVENTIONS FOR SOCIAL COMMUNICATION AND INTERACTION

- R Interventions to support social communication should be considered for children and young people with ASD, with the most appropriate intervention being assessed on an individual basis.
- ✓ Adapting the communicative, social and physical environments of children and young people with ASD may be of benefit (options include providing visual prompts, reducing requirements for complex social interactions, using routine, timetabling and prompting and minimising sensory irritations).

BEHAVIOURAL/PSYCHOLOGICAL INTERVENTIONS

INTENSIVE BEHAVIOURAL AND DEVELOPMENTAL PROGRAMMES

- R Access to support from staff trained in applied behaviour analysis-based technologies (eg Picture Exchange Communication System, discrete trial training, task analysis, prompting, fading or shaping) to build independence in adaptive, communication and social skills should be considered for children with ASD.

COGNITIVE BEHAVIOURAL THERAPIES

R Cognitive behavioural therapy may be considered, using a group format where available and appropriate, to treat anxiety in children and young people with ASD and who have average verbal and cognitive ability.

✓ The delivery of cognitive behavioural therapy should be adapted for people with ASD.

✓ Cognitive behavioural therapy can be considered as a means of treating a coexisting condition if recommended in guidelines for that condition.

OCCUPATIONAL THERAPY AND SENSORY INTEGRATION THERAPY

✓ Children and young people affected by ASD may benefit from occupational therapy, advice and support in adapting environments, activities and routines in daily life.

SLEEP MANAGEMENT

✓ Behavioural therapy should be considered for children and young people with ASD who experience sleep problems.

✓ Children with ASD who present with signs of possible obstructive sleep apnoea, or sleep disordered breathing (loud snoring, choking or periodic stopping of breathing during sleep) should be referred to sleep medicine services for assessment.

FACILITATED COMMUNICATION

R Facilitated communication should not be used as a means to communicate with children and young people with ASD.

ADDITIONAL INTERVENTIONS TO ADDRESS BEHAVIOURAL CHALLENGES

✓ Behavioural interventions may be considered to address a wide range of specific behaviours, including those that challenge, in children and young people with ASD, both to reduce symptom frequency and severity and to increase the development of adaptive skills.

✓ Healthcare professionals should be aware that some behaviours that challenge may be due to an underlying lack of skills development in the child/young person and also may represent an individual's strategy for coping with their difficulties and circumstances.

✓ Healthcare professionals should be aware that factors in the social and physical environment may contribute to positive behaviours or those that challenge.

NUTRITIONAL INTERVENTIONS

✓ Gastrointestinal symptoms in children and young people with ASD should be managed in the same way as in children and young people without ASD.

✓ Advice on diet and food intake should be sought from a dietician for children and young people with ASD who display significant food selectivity and dysfunctional feeding behaviour, or who are on restricted diets that may be adversely impacting on growth, or producing physical symptoms of recognised nutritional deficiencies or intolerances.

NON-PHARMACOLOGICAL INTERVENTIONS FOR ADULTS

R Facilitated communication should not be used as a means to communicate with adults with ASD.

✓ Psychosocial interventions should be considered for adults with ASD if indicated for managing coexisting conditions.

PHARMACOLOGICAL INTERVENTIONS FOR CHILDREN AND YOUNG PEOPLE

FRAMEWORK FOR USE OF MEDICATION

No pharmacological interventions have ASD as a licensing indication, and there are few drugs specifically licensed for use in children and adolescents (*see section 1.3.2 of the full guideline for advice on prescribing of licensed medicines outwith their marketing authorisation*).

- ✓ Pharmacological intervention for children with ASD should only be undertaken by doctors with appropriate training and access to pharmacy or other support as required.

SECOND-GENERATION ANTIPSYCHOTICS

- R Antipsychotics (including second-generation antipsychotics) should not be used to manage the core symptoms of ASD in children and young people.
- R Second-generation antipsychotics may be considered to reduce irritability and hyperactivity in children and young people with ASD in the short term (eight weeks). Patients and their carers should be advised of potential side effects before treatment is started.
- R Children prescribed second-generation antipsychotics should be reviewed after three or four weeks of medication. If there is no clinically important response at six weeks treatment should be stopped.

METHYLPHENIDATE

- R Methylphenidate may be considered for management of attention difficulties/hyperactivity in children or young people with ASD.
- ✓ Use of a test dose to assess if methylphenidate is tolerated could be considered in children prior to any longer trial.
Side effects should be carefully monitored (*see SIGN guideline 112 on attention deficit and hyperkinetic disorders in children and young people*).

ANTIDEPRESSANTS

- R Selective serotonin reuptake inhibitors should not be used to manage core features of ASD (eg repetitive behaviours) in children and young people.
- R Selective serotonin reuptake inhibitors should be considered for children and young people with comorbid symptoms on a case-by-case basis.

MELATONIN

- R In children with ASD who have sleep difficulties which have not resolved following behavioural interventions, a trial of melatonin to improve sleep onset should be considered.
- ✓ Use of melatonin should follow consultation with a paediatrician or psychiatrist with expertise in the management of sleep medicine in children and/or ASD, and be in conjunction with behavioural interventions.
- ✓ Melatonin prescription should be reviewed regularly in the context of any emerging possible side effects and/or reduced therapeutic effect.
- ✓ Children with ASD who present with signs of possible obstructive sleep apnoea, or sleep-disordered breathing (loud snoring, choking or periodic stopping of breathing during sleep) should be referred to sleep medicine services for assessment.
- ✓ Obtain an adequate baseline sleep diary before any trial of melatonin.
Continue sleep hygiene measures (bedtime and wake-up routine, avoidance of day-time sleep) and a sleep diary, during any medication trial.

SECRETIN

- R** Secretin is not recommended for the management of symptoms of ASD in children and young people.

PHARMACOLOGICAL INTERVENTIONS FOR ADULTS

- ✓ Adults with ASD who are prescribed any pharmacological therapies should be reviewed regularly to ensure the intervention is of benefit, being used appropriately and for any signs of adverse events.

ANTIPSYCHOTICS

- R** Antipsychotic medication should be considered for addressing behaviour that challenges in adults with ASD when psychosocial or other interventions could not be delivered due to the severity of behaviour that challenges.
- R** Antipsychotics should be prescribed by a specialist and quality of life outcomes monitored carefully. Review the effects of medication after three to four weeks and discontinue if there is no indication of clinically important response at six weeks.

ANTIDEPRESSANTS

- ✓ Adults with ASD who have coexisting mental ill health that may respond to antidepressants should be offered treatment, with close monitoring for response and adverse effects or interactions with other medications

MELATONIN

- R** In adults with ASD who have sleep difficulties which have not resolved following behavioural interventions, a trial of melatonin to improve sleep onset may be considered.
- ✓ Use of melatonin should follow consultation with a psychiatrist with expertise in the management of sleep medicine and/or ASD, and be in conjunction with behavioural interventions.
- ✓ Obtain an adequate baseline sleep diary before any trial of melatonin.
- ✓ Continue sleep hygiene measures (bedtime and wake-up routine, avoidance of day-time sleep) and a sleep diary, during any medication trial.
- ✓ Melatonin prescription should be regularly reviewed in the context of any emerging possible side effects and/or reduced therapeutic effect.
- ✓ Adults with ASD who present with signs of possible obstructive sleep apnoea, or sleep disordered breathing (loud snoring, choking or periodic stopping of breathing during sleep) should be referred to sleep medicine services for assessment.

SECRETIN

- R** Secretin should not be considered for the management of symptoms of ASD in adults.

SERVICE PROVISION

TRAINING

- R** All professions and service providers working in the ASD field should review their training arrangements to ensure staff have up-to-date knowledge and adequate skill levels.

INTERVENTIONS AND MEETING SUPPORT NEEDS

- R** Education and skills interventions for parents of preschool children with ASD should be offered.
- ✓ Education and skills interventions should be offered to parents of all children and young people diagnosed with ASD.

SUPPORT DURING TRANSITION

- ✓ Families and services should plan ahead to reduce the impact of transitions.
- ✓ Social work contact with families should be instituted or extended during periods of transition.
- ✓ Families should be advised of relevant legislation under the Adults with Incapacity Act (Scotland) and the Children and Young People Act (Scotland) 2014.

PROVISION OF INFORMATION AND SUPPORT

- R** • Professionals should offer individuals, parents and carers good-quality written information and an opportunity to ask questions when sharing information about the individual with ASD.
- Information should be provided in an accessible and understandable form.
- ✓ For adults with ASD appropriate consent must be obtained before information is shared with carers.
- ✓ The information shared should relate to the individual's particular ASD presentation.
- ✓ People with ASD and their families/carers require support and high-quality verbal and written information at time of diagnosis. This should include a written report of the outcome of the various assessments and the final diagnosis. Copies of the letters sent to the various professionals who have been asked to assess their child or the adult may also be included.
- ✓ Professionals involved in sharing of an ASD diagnosis and information provision should receive ongoing education and training.
- ✓ Individuals with ASD and their parents, relatives or carers should be encouraged to continue to learn about ASD and about any useful interventions and support.

SOURCES OF FURTHER INFORMATION

Autism Network Scotland

Tel: 0141 444 8146

www.autismnetworkscotland.org.uk • Email: autism.network@strath.ac.uk

National Autistic Society Scotland

Tel: 0141 221 8090

Web: www.autism.org.uk • Email: scotland@nas.org.uk

Research Autism

Tel: 020 3490 3091

www.researchautism.net • Email: info@researchautism.net

Scottish Autism (Autism Advice line)

Tel: 01259 222 022

www.scottishautism.org • Email: autism@scottishautism.org

LOCAL SUPPORT GROUPS

www.nhsinform.co.uk/support-services

Tel: 0800 22 44 88



www.healthcareimprovementscotland.org

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The Healthcare Environment Inspectorate, the Scottish Health Council, the Scottish Health Technologies Group, the Scottish Intercollegiate Guidelines Network (SIGN) and the Scottish Medicines Consortium are key components of our organisation.

