

Autism Spectrum Disorders in Early Childhood: An Overview for Practicing Physicians

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The term *autism spectrum disorder* (ASD) (termed *pervasive developmental disorders* [PDDs] in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition [text revision] (DSM-IV-TR) [1]) refers to developmental disorders of varying clinical presentation that share a core feature of pervasive and qualitative impairments in reciprocal social interaction [1–3]. In the past decade, researchers and clinicians have broadened the diagnostic concept to include milder and atypical forms of autism and autism-related disorders that are represented as a spectrum [4]. These disorders are estimated to occur at a much higher rate than previously thought, making it likely for the average physician to encounter patients with ASDs in his or her practice. Thus, the purpose of this article is to review the recent literature on ASDs in early childhood to prepare physicians for the critical role they can take in identification, referral, and intervention for children with ASDs.

Current diagnostic criteria and course

Three PDDs are typically considered ASDs: autism, Asperger's disorder, and PDD not otherwise specified (NOS) [5]. Although all ASDs involve impairments in reciprocal social interaction skills, the degree of impairment in communication skills and cognitive abilities and the form and degree of stereotyped behavior, interests, and activities vary. Each

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disorder is associated with a slightly different set of diagnostic criteria as described in this article.

Autism

Current diagnostic criteria for autism specify multiple impairments in social functioning and communication as well as restricted and repetitive behavior present before the age of 3 years [1,2]. To qualify for a diagnosis, individuals must meet six criteria, including at least two criteria in the realm of impaired social interaction and one criterion each in the areas of communication impairment and restricted, repetitive, or stereotyped patterns of behavior. The manifestations of this disorder vary greatly in terms of the degree of impairment, ranging from early estimates of 75% of individuals having comorbid mental retardation [6,7] to recent reviews suggesting as few as 30% to 60% of individuals with this specific comorbidity [8,9].

People with autism experience substantial social impairments that have an impact on almost every aspect of their interactions with others. Peer interactions are often avoided, and play behaviors often remain stereotypic and lacking in pretense [10,11]. Even within the first 12 to 18 months of life, parents often note difficulties in joint attention, social responsiveness, and eye contact; these have been confirmed by retrospective videotaped studies [12]. These social impairments contribute greatly to subsequent language delays by dramatically limiting the number of meaningful learning opportunities during a critical developmental period.

Communication is another core deficit of autism. Moderate to profound language impairments typically are the first symptoms to draw the pediatrician's notice. Many children with autism fail to develop language at all unless dramatic intervention procedures are pursued [13,14]. Those who do develop speech often engage in echolalia (ie, repeating words or phrases heard previously) or fail to speak for social purposes, such as engaging in conversation [15]. Effective language intervention is a critical component of effective intervention, because one of the best predictors of outcome for children with autism is the development of spontaneous language before 6 years of age [16].

Restricted and repetitive behavior is the third domain affected in children with autism, occurring more commonly in older preschool- and school-aged children than in young children or adolescents and adults [17–19]. Common repetitive motor behaviors observed in children with autism include hand flapping, toe walking, and rocking [18]. Restricted interests are often evident, with strong preferences for only a few or unusual items and distress and problem behavior when those items are not readily available. Insistence on sameness in routines and rituals or compulsions can be observed in most aspects of daily activities, taking the form of rigid sequences of actions or extreme distress in the face of relatively minor changes in the environment or scheduled events [4].

Asperger's disorder

Although first described in 1944 by Asperger [20], the disorder drew virtually no attention from the scientific and clinical communities until Lorna Wing [21] translated Asperger's work and began a line of research on the disorder. The disorder was not classified as a PDD along with autism until the *DSM-IV* was published in 1994 [22,23]. The criteria for Asperger's disorder share some similarities with autism. To qualify for a diagnosis of Asperger's disorder, an individual must demonstrate at least two characteristic criteria in the area of impaired social interaction and one characteristic criterion in the area of restricted, repetitive, and stereotyped patterns [1]. Individuals with Asperger's disorder do not have clinically significant delays in language skills, cognitive development, or age-appropriate self-help skills or adaptive behavior [1]. In fact, individuals with Asperger's disorder are often verbally fluent and have above-average intelligence in many areas, whereas clear deficits and learning disabilities may be evident in other areas [23,24]. The restricted and repetitive patterns are often manifested as abnormally intense interest and factual knowledge about unusual and age-inappropriate topics and strong emotional responses to change in routine or environment [23]. Finally, developmental milestones are often within normal to advanced limits; thus, identification of these children typically occurs at a later age as difficulties develop on entry into preschool or daycare or into general education environments [24].

Pervasive developmental disorder not otherwise specified

A diagnosis of PDD-NOS is used for milder problems on the spectrum when an individual displays a severe impairment in the development of reciprocal social interaction associated with verbal or nonverbal communication skills or with the presence of stereotyped behavior, interests, and activities but without meeting criteria for another PDD [1]. Thus, an individual diagnosed with PDD-NOS may exhibit behavior similar to individuals diagnosed with autism or Asperger's disorder but not to the extent that he or she meets the criteria for one of those disorders.

Prevalence

The most recent evaluation of the prevalence of ASDs conducted by the US Centers for Disease Control and Prevention (CDC) estimates that among children aged 4 to 17 years, 5 to 6 of 1000 are affected [25]. Previous estimates were much lower, at approximately four to five cases per 10,000 individuals [26]. The CDC estimates are based on parental report of a child having received a diagnosis, however. Other recent articles using different methodologies have produced estimates in the range of 1 in 1000 children for autism and 1.6 in 1000 children for all other ASDs [9,27,28].

Approximately 20% of children with autism experience a skill regression around the age of 18 months after relatively typical development, including acquisition of language and play skills [29,30]. This regressive subtype has been validated using home videotapes in which children who had regressed were no different than typically developing children in joint attention and communicative behaviors at 1 year of age but were indistinguishable from children with autism in these deficit areas by 24 months of age [31]. The unfortunate timing of most regressions (around 18 months of age) was the basis for two controversial publications that sparked relatively widespread concern among laypersons about the possibility of vaccinations [32] or mercury-based preservatives [33] as a cause of autism. Consequently, the rate of measles vaccinations has decreased, and infections have increased [34], in spite of the subsequent publication of multiple well-controlled studies that have found no differences in rates of autism among children who are vaccinated and those who are not [35–42]. Currently, there is no scientific evidence to support a link between vaccination and autism [43].

Screening and referral

It is generally believed that early identification and early intervention are associated with the best outcomes for children with ASDs [44]. In the United States, however, the average age of identification is still older than 4 years of age [27,45], despite the ability to identify ASDs as early as 2 years of age. In a recent survey of licensed pediatricians in Maryland and Delaware, 82% screened for general delays but only 8% screened for ASDs [46]. Thus, researchers and clinicians in recent years have endeavored to develop screening procedures and screening tools that pediatricians can use as part of typical “well child” visits at 18 to 24 months to identify children who may be at risk of developing ASDs. Researchers can now reliably identify children as early as 24 months of age [5,47]; however, ASD symptoms can appear much earlier. Although these early symptoms are often insufficient for reliable diagnosis, they highlight the importance of early screening and comprehensive follow-up. Pediatricians should screen all children for ASDs at least once at well-child visits, with follow-up interview for those children scoring higher than the cutoff. At-risk children should be screened at every visit between the ages of 18 and 36 months, and if scores are greater than the cutoff, children should be referred for a comprehensive diagnostic evaluation, including such tools as the Autism Diagnostic Interview-Revised [48], Autism Diagnostic Observation Schedule [49], and measures of developmental and adaptive functioning.

One of the most common screening tools is the Checklist for Autism in Toddlers (CHAT) [50]. This tool uses parent report for 9 items plus medical staff administration of 5 direct-observation test items to identify at-risk children. The sensitivity is 38% when children at medium and high risk are included, with milder cases of autism generally missed. A recent 2-year

follow-up study from a different sample indicates that the CHAT criteria for medium to high risk for autism predicted classification with autism 2 years later 83% of the time [51]. Researchers in the United States have modified the tool and tested it in pediatric practice with children 18 months and older under the name of Modified CHAT (M-CHAT) [52]. This 23-item tool is based entirely on parent report and has resulted in a sensitivity of 0.87 and specificity of 0.99, suggesting that the M-CHAT identified most children who subsequently developed ASDs and did not falsely identify children. A follow-up interview has since been developed that further reduces the false-positive rate of the checklist [53]. The CHAT and M-CHAT are freely available on the First Signs Web site [54].

There are also several commercially available alternatives to the CHAT and M-CHAT. The Social Communication Questionnaire was developed primarily for research purposes and is most appropriate for children older than the age of 48 months [55]. This 40-item scale is available from Western Psychological Services. The Pervasive Developmental Disorders Screening Test-II (PDDST-II) [56] is a 23-item parent report screening measure useful with children older than 18 months of age. The PDDST-II is available from Harcourt Assessment. Children with Asperger's disorder may not show substantial difficulties until later (ie, 4 years of age and older), but cases in which parents report problems similar to those described previously should be screened using a checklist, such as the Gilliam Asperger's Disorder Scale [57], which is appropriate for those aged 3 to 22 years.

Treatment of early childhood autism

There currently exists an abundance of treatment options for early childhood autism. These treatments vary in their modality (eg, psychoeducational, biomedical), in how thoroughly they have been disseminated, and in the degree to which they are supported by well-controlled research. Physicians should be aware that professional workshops and the Internet have resulted in widespread dissemination of treatments for ASDs. This proliferation of information, combined with the perseverance with which a parent is likely to pursue treatment options, sometimes leads to ineffective or iatrogenic treatment.

Ten treatments for early childhood autism are presented here [58].¹ These specific treatments were selected because they have been demonstrated to be effective, are relatively common, or are likely to be presented to a physician for opinion. Each treatment is described, and a summary of its supporting empiric evidence is presented. When counseling parents, the authors recommend, at the least, that they are made aware of the National Research

¹ See also the web site of the Association for Science in Autism Treatment in which dozens of treatments for ASD are critically analyzed with respect to their supporting evidence [58].

Council's recommendations for early intervention. The National Research Council recommends the following, regardless of the specific treatment approach: (1) entry into a treatment program as soon as the diagnosis is seriously considered, (2) intensive treatment delivery (at least 25 hours per week), (3) treatment that comprehensively addresses the disorder's key deficit areas, (4) formal parent involvement in treatment delivery, (5) low student/teacher ratios, and (6) ongoing evaluation of the program's effectiveness [44].

Psychoeducational treatment

Early and intensive behavioral intervention

Early and intensive behavioral intervention (EIBI) is a skills-based treatment approach based on the science of applied behavior analysis. Although various EIBI models exist, they all share the same three primary characteristics: (1) intensive treatment delivery (eg, 30–40 hours per week for 2 years); (2) a hierarchically organized curriculum that focuses on learning readiness, communication, social, and preacademic repertoires [59,60]; and (3) the use of teaching methods based on the principles of operant conditioning [61]. Although multiple well-controlled investigations have been conducted on EIBI, the most well known is the investigation of the University of California at Los Angeles (UCLA) Young Autism Project, in which nearly half of experimental group participants with ASDs achieved normal intellectual functioning after 2 to 3 years of one-to-one treatment delivered for 40 hours per week [14,62]. This outcome has since been replicated several times by independent investigators [63–65]. To date, no other treatment approach has been able to produce this magnitude of effect for children with ASDs [15]. In addition, the US Surgeon General has recommended EIBI as an effective treatment [66]. Parents who are interested in pursuing this treatment approach should be referred to the Behavior Analyst Certification Board [67] to locate a professional qualified to oversee such a program.

Treatment and education of autistic and related communication-handicapped children

Project TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children) is a classroom model for the instruction of children with ASDs. Rather than attempting to intensively remediate the core deficits of autism, the goal of Project TEACCH is to accommodate the learning styles of children with autism by using a variety of strategies, such as visual stimuli to prompt skills, individual workstations to minimize distraction, and picture activity schedules to assist with transition, among others [68]. The TEACCH model has been widely disseminated in classrooms across the United States. Although the National Research Council considers Project TEACCH a plausible intervention with positive program evaluation data [44], there are currently no well-controlled studies of its effects.

Developmental and relationship approaches

The relationship development intervention (RDI) and developmental, individual-difference, relationship-based model (DIR) are treatment packages that are based on developmental theory. In RDI, which is based on a relatively new theory of “dynamic intelligence,” children are taught to make “authentic social connections” through numerous parent-led treatment sessions [69]. The social deficits of autism seem to be RDI’s primary targets for change. DIR is based on a stage-based developmental theory of child development [70]. During DIR, a caregiver participates in interactive “floor time” sessions with the child, in which he or she follows the child’s lead. Over time, the caregiver attempts to influence the child to participate in more sophisticated interactions. Like RDI, social deficits seem to be the primary focus of DIR treatment. Despite the popularity of these two approaches and their relatively widespread dissemination, no well-controlled studies have been published to document their effects. Furthermore, the developmental theories on which RDI and DIR are based are untested. Thus, the authors recommend that these factors be included in any deliberation regarding the use of these approaches.

Sensory integrative therapy

Sensory integrative therapy (SIT) is a common treatment for ASDs that is often administered by occupational therapists in school settings. SIT is based on the theory that many problems associated with developmental disability are a result of improper neurologic processing because of dysfunction of the sensory systems (eg, vestibular, proprioceptive, tactile). Treatment comprises a series of exercises and activities (eg, joint compression, body brushing, spinning) designed to stimulate and help reorganize the sensory systems. To date, there have been relatively few studies published on SIT, and they have generally used poor experimental controls. The findings of this small body of literature are equivocal in support of SIT [71]. In addition, the theory on which SIT is based is not supported by the literature [72]. Nevertheless, SIT is ubiquitous in the school system as a treatment for ASDs. Therefore, the authors’ recommendation is for the effects of SIT to be carefully and objectively assessed to determine its benefit at the individual level when it is implemented.

*Biomedical treatment**Gluten-free/casein-free diet*

Gluten and casein are groups of proteins that are found in cereals (eg, wheat, rye) and dairy products (eg, milk, cheese), respectively. A gluten-free/casein-free (GFCF) diet is a popular form of treatment of childhood autism. One of the rationales for this treatment involves abnormal gastrointestinal (GI) functioning in individuals with autism. Gluten and casein are broken down into metabolites that act as opiate agonists. It is hypothesized

that children with autism have “leaky guts,” such that the compounds seep out of the stomach and enter the central nervous system, where they facilitate opioid activity in the brain [73]. To date, the evidence for the use of the GFCF diet in children with autism is equivocal. The results of a randomized single-blind experiment in 20 children with autism showed statistically significant differences between experimental and control group participants on measures of autistic behavior [74]. The results of a subsequent double-blind experiment showed no differences between experimental and control group participants, however [75]. Despite the absence of convincing evidence of the effectiveness of the GFCF diet, the treatment has been heavily disseminated, most likely because it is viewed as nutritional and noninvasive. Children with autism often have food selectivity, however, which can be exacerbated with overly restrictive diets [76,77]. Thus, the authors do not recommend the use of the GFCF diet, especially for children who already have demonstrated food selectivity.

Vitamin therapy

Vitamin supplements, such as vitamin C, vitamin B₆, and vitamin B₁₂, represent a relatively common form of treatment for ASDs [78]. These supplements are generally used because it is thought that they enhance neurotransmitter function in ways beneficial to individuals with ASDs. The most prevalent vitamin supplement for ASDs is a combination of vitamin B₆ and magnesium (Mg). This combination has also received the most research attention of all the vitamin supplements for ASDs. Although numerous early reports indicated a positive effect of vitamin B₆ and Mg on ASD symptoms, these investigations were generally methodologically flawed [79]. Several more recent and better controlled investigations have produced equivocal findings [80]. Given the lack of convincing evidence for the effects of vitamin B₆ and Mg and the dearth of research on other vitamin supplements, the authors recommend that physicians help parents who choose this treatment approach to monitor dosage and adverse effects [77].

Risperidone

Risperidone (Risperdal) is an atypical antipsychotic medication used to treat symptoms of schizophrenia, bipolar disorder, and Tourette’s syndrome. In 2006, the US Food and Drug Administration (FDA) approved risperidone for the treatment of problem behavior (eg, aggression, self-injury, tantrums) associated with autism. The basis for this approval was a series of recent investigations, most of which were methodologically sound. In one randomized clinical trial, it was shown that 69.4% of 48 children with ASDs who received risperidone had a mean reduction in reported irritability scores of 56.9%. At 6 months, most participants demonstrated sustained benefits [81] and minor improvements in adaptive behavior [82], although the core features of autism remained unchanged [83]. The most common adverse effects of risperidone are weight gain and sleepiness [84,85]. It has

already been well established in the literature that the problem behavior of individuals with developmental disabilities (including autism) serves as a way to communicate for attention, escape from unpleasant situations, and gain access to preferred toys and activities [86,87]. Functional assessment, the process by which these communicative intentions are identified, has been shown to be effective in selecting psychoeducational interventions (eg, functional communication training, noncontingent reinforcement) that result in substantial reductions in problem behavior without medication [88]. Thus, the authors recommend the use of risperidone as a treatment for problem behavior associated with autism only after a function-based approach has been shown ineffective.

Chelation therapy

Chelation therapy is the removal of toxic metals, such as lead, from soft tissues in the body through the use of substances (chelators) that bind with the metals. Common methods of chelation include the oral or intravenous administration of dimercaptosuccinic or lipoic acids. Although the FDA has not approved chelation therapy for autism, its use and dissemination have been facilitated by the unsupported notion that vaccines containing thimerosal (mercury) are causally related to the onset of autism [43]. Based on the invasiveness of the chelation procedure, the lack of any published empiric support, and the fact that at least one child with autism has died during the procedure [89], the authors advise against recommending chelation therapy as a treatment for autism.

Secretin

Secretin, a hormone secreted by the duodenum in response to increased acidity in the stomach, was approved by the FDA in 1981 for use in the diagnosis of GI disorders. Secretin was used as a treatment for autism after a case series was published in which three children with ASDs received a single infusion of intravenous porcine secretin during diagnostic GI endoscopy for chronic diarrhea [90]. Within 5 weeks, all children evidenced amelioration of their GI symptoms and their parents reported dramatic improvement in their children's communication and social behavior. A recent literature review found that 12 of 13 placebo-controlled experiments found no reliable symptomatic relief of autism from the hormone secretin beyond that which could be expected from a placebo, however [91]. Given the overwhelming evidence against the effectiveness of secretin and the invasiveness of the procedure, the authors advise against using intravenous secretin as a treatment for autism.

Hyperbaric oxygen therapy

Hyperbaric oxygen therapy (HBOT) involves the inhalation of pure oxygen inside a pressurized chamber. Although originally developed to treat

diving disorders, such as decompression sickness, HBOT has since been successfully used to treat a wide range of medical problems, such as malignant tumors [92] and chronic diabetic wounds [93]. HBOT is now available for home treatment as a result of the advent of portable pressurized chambers. HBOT has not yet been experimentally evaluated for the treatment of autism. The only evidence for the use of HBOT in autism treatment is a preliminary case series that suggests positive outcomes [94]. The Internet includes numerous anecdotal reports and commercial applications. Given the lack of well-controlled experimentation on HBOT, however, the authors advise against pursuing this form of therapy until more convincing data emerge.

Common medical problems associated with autism spectrum disorders

Several commonly observed medical problems in children with ASDs are worthy of discussion, although they are not formally considered as part of the autism spectrum, *per se*. These problems occur so frequently in children with ASDs and can produce such substantial negative effects on quality of life that all practitioners should screen for them when serving this population.

Sleep problems

Studies have reported sleep disturbances in 44% to 83% of children with autism, with the highest rates of sleep disturbances among preschool-aged children [95,96]. Most children with sleep problems begin having problems in infancy, with the most common problems being difficulty in falling asleep and night and early morning awakenings [97,98]. It is less clear to what degree total hours of sleep per night is lower for children with autism than for typically developing children because of the equivocal findings reported in the literature [95,96,99]. A recent study investigated sleep problems in adolescents and young adults and found evidence of substantial sleep disturbances in the form of low sleep efficiency and long latencies to sleep onset for 80% of the participants, even when self-report and parent report suggested only moderate impairments [100]. Thus, sleep problems seem to persist into adulthood and to have an impact on the daily functioning of individuals with ASDs [101].

It is critically important for the primary care physician to screen for sleep disturbances because of the everyday ramifications of fatigue for children with autism. Several studies suggest that fatigue can worsen such problem behaviors as aggression, self-injurious behavior, and even food refusal [102–104]. In addition, safety issues may arise when children with ASDs are awake but unsupervised. Parents often resort to such strategies as cosleeping or light sleeping, increasing their own fatigue, which may result in less consistency in parenting and problem solving. Parents also use locks to ensure that the child cannot exit his or her room, which presents fire safety concerns.

Physicians are encouraged to inquire about sleep issues and ill-advised strategies that the parents may be using to cope with them. Intervention

resources should be recommended if families are struggling with sleep problems. Electronic alerting systems (eg, WanderGuard, WanderGuard UK, London, England) provide a safe alternative to locks in the short term. Secretin has proven ineffective in reducing sleep problems [105], but an open-label study has shown positive effects of controlled-release melatonin in children with autism [106]. The evidence base for melatonin is limited, however, and caution is advised. Durand's parent-friendly guide to long-term treatment of sleep problems in children with disabilities [107] and Schreck's review of empirically supported behavioral treatment strategies for sleep disturbances in children with autism [108] are excellent resources for environmental and behavioral strategies.

Feeding disorders

Feeding disorders are common among children with ASDs and often take the form of food or texture selectivity, refusal of liquids, and problem behaviors associated with mealtimes [109]. A survey of parents with typically developing children and parents of children with autism found that feeding problems are relatively common for all children (50% had a problem at some time) but are nearly ubiquitous for children with ASDs (90% had a problem at some time) [110]. This discrepancy has since been confirmed in an empiric study that revealed significantly more feeding problems for children with autism than for typically developing children [111]. A recent investigation found that only 4 of 30 students with autism willingly accepted most foods [109]. The others exhibited a wide range of patterns of food selectivity, including selectivity by type (eg, starch, protein) and by texture. Thus, the typical child with an ASD experiences food refusal and selectivity concerns at some point, making it critical that physicians counsel parents about the importance of establishing an effective mealtime routine, consistently presenting new foods, and addressing food refusal at its earliest presentation.

Kedesdy and Budd's overview of assessment and treatment of feeding problems from a biobehavioral perspective [112] and Kerwin's review of empirically supported treatments for pediatric feeding disorders [113] are excellent resources. In addition to selectivity attributable to strong preferences, physiologic problems, such as esophageal reflux and nausea, are sometimes responsible for initial food refusal and should be evaluated before attempting other interventions. Refusal problems may persist even when these problems have been resolved, however, because of behavioral factors. Assessment typically involves the use of functional assessment and preference assessments to investigate the variables associated with food refusal [114,115]. Subsequent treatment by a pediatric psychologist with behavioral training and experience in feeding disorders typically involves a combination of several behavioral interventions designed to increase the child's motivation to consume novel foods and to minimize the aversiveness of the feeding experience [113,116].

Gastrointestinal problems

Chronic GI problems are common for children with ASDs and result in such symptoms as abdominal pain, chronic diarrhea, bloating, and irritability. Two studies have found that approximately 70% of their participants with autism had inflammation of the GI tract and evident symptoms [117,118]. Two other studies found only 23% [119] and 17% [42] of children with autism exhibiting GI symptoms, however. Another investigation found no difference in the history of GI problems of children with autism and matched controls before the date of diagnosis, suggesting that the GI problems are neither causally related to autism nor particularly associated with regression [120]. Severe food selectivity may account for many of the GI problems that these children develop throughout their lifetimes. For the children who do experience substantial GI problems, their discomfort and diarrhea may have a great impact on their adaptive and social functioning and may contribute to overall behavior problems. Thus, children with ASDs should be screened for GI problems and treated accordingly.

Summary

The authors hope that the summary and recommendations provided here are helpful in designing more sensitive and effective medical services for individuals with ASDs and their families. Given the importance of treating ASDs as early as possible, the authors recommend that primary care physicians adopt universal screening practices and evaluate parental reports regarding possible ASD-related deficits rather liberally. Furthermore, establishing a relationship with local diagnosticians before they are needed can help to expedite the diagnostic process for families. Even without universal screening, recent estimates of the prevalence of ASDs suggest that it is likely for primary care physicians, pediatricians, and pediatric neurologists to come into contact with individuals with ASDs in their practice. To maintain consistency with trends in evidence-based medicine, the authors encourage physicians to make recommendations and referrals for treatment that are informed by the available empiric support. Finally, the authors recommend that physicians who have individuals with ASDs in their practice educate patients and their families about comorbid medical conditions (eg, sleep, feeding, GI problems) and assess whether they are present in their patients.

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