

CONTENTS

| | |
|------------------|-------------|
| Foreword | xiii |
| Harsh K. Trivedi | |

| | |
|--|-----------|
| Preface | xv |
| Christopher J. McDougle and David J. Posey | |

| | |
|---|------------|
| Treatment of Inattention, Overactivity, and Impulsiveness in Autism Spectrum Disorders | 713 |
| Michael G. Aman, Cristan A. Farmer, Jill Hollway, and L. Eugene Arnold | |

We reviewed the recent literature on medicines used to manage inattention, impulsiveness, and overactivity in children with pervasive developmental disorders (autistic disorder, pervasive developmental disorder not otherwise specified, Asperger's disorder) using computer searches of pharmacologic studies. A substantial number of reports were identified and summarized. The literature tends to be dominated by uncontrolled studies, although the number of controlled trials is growing. Findings are described for psychostimulants, noradrenergic reuptake inhibitors, antipsychotics, alpha adrenergic agonists, antidepressants, anxiolytics, cholinesterase inhibitors, N-methyl-D-aspartate receptor blockers, and antiepileptic mood stabilizers. Evidence for a positive effect is strongest for psychostimulants, noradrenergic reuptake inhibitors, antipsychotics, and alpha adrenergic agonists. Evidence for efficacy seems weakest for newer antidepressants, anxiolytics, and mood stabilizers.

| | |
|---|------------|
| Pharmacotherapy of Irritability in Pervasive Developmental Disorders | 752 |
| Kimberly A. Stigler and Christopher J. McDougle | |

Children and adolescents diagnosed with autism and related pervasive developmental disorders (PDDs) often sustain irritability,

including aggression, self-injurious behavior, and tantrums. Research to date supports the use of the atypical antipsychotics as a first-line pharmacologic treatment for this target symptom domain in PDDs. Currently, the atypical antipsychotic risperidone is the only medication approved by the US Food and Drug Administration for irritability in youth with autism. Additional large-scale, placebo-controlled studies of other medications are needed to determine their efficacy for the treatment of irritability in this diagnostic group.

Psychopharmacologic Interventions for Repetitive Behaviors in Autism Spectrum Disorder

753

Latha Soorya, Jessica Kiarashi, and Eric Hollander

This article provides an overview of psychopharmacological treatments for repetitive behaviors in autism spectrum disorders (ASDs) in the context of current conceptualizations of this understudied core symptom domain. The available literature on the widely used selective serotonin reuptake inhibitors (SSRIs), including fluvoxamine, fluoxetine, citalopram, escitalopram, and sertraline, are reviewed. In addition to SSRIs, research on effects of other pharmacologic interventions such as divalproex sodium, risperidone, and the neuropeptide oxytocin are presented. To date, data are mixed for interventions commonly prescribed in clinical practice and suggest several areas of investigation in advancing research on the medication management of repetitive behaviors.

Assessment and Pharmacologic Treatment of Sleep Disturbance in Autism

773

Kyle P. Johnson and Beth A. Malow

Like children with other developmental disabilities, children with autism spectrum disorders suffer with sleep problems at a higher rate than do typically developing children. There is a growing recognition that addressing these sleep problems may improve daytime functioning and decrease family stress. Presented here is a discussion of the sleep problems experienced by children with autism spectrum disorders, focusing on appropriate assessment and pharmacologic treatment.

Developing Drugs for Core Social and Communication Impairment in Autism

787

David J. Posey, Craig A. Erickson, and Christopher J. McDougle

There are many challenges to studying drug effects on core social and language impairment in autism. Drugs such as fenfluramine, naltrexone, and secretin do not appear to be efficacious for these core symptoms. Risperidone has led to improvement in some aspects of social relatedness when used to treat irritability in autism. More research is needed on the utility of selective serotonin

reuptake inhibitors, cholinergic drugs, glutamatergic drugs, and oxytocin for core autistic symptoms.

Complementary and Alternative Medicine Treatments for Children with Autism Spectrum Disorders

803

Susan E. Levy and Susan L. Hyman

Complementary and alternative medical (CAM) treatments are commonly used for children with autism spectrum disorders. This review discusses the evidence supporting the most frequently used treatments, including categories of mind-body medicine, energy medicine, and biologically based, manipulative, and body-based practices, with the latter two treatments the most commonly selected by families. Clinical providers need to understand the evidence for efficacy (or lack thereof) and potential side effects. Some CAM practices have evidence to reject their use, such as secretin, whereas others have emerging evidence to support their use, such as melatonin. Most treatments have not been adequately studied and do not have evidence to support their use.

Applied Behavior Analysis Treatment of Autism: The State of the Art

821

Richard M. Foxx

The treatment of individuals with autism is associated with fad, controversial, unsupported, disproven, and unvalidated treatments. Eclecticism is not the best approach for treating and educating children and adolescents who have autism. Applied behavior analysis (ABA) uses methods derived from scientifically established principles of behavior and incorporates all of the factors identified by the US National Research Council as characteristic of effective interventions in educational and treatment programs for children who have autism. ABA is a primary method of treating aberrant behavior in individuals who have autism. The only interventions that have been shown to produce comprehensive, lasting results in autism have been based on the principles of ABA.

Interventions to Improve Communication in Autism

835

Rhea Paul

Children with autism benefit from intensive, early intervention that focuses on increasing the frequency, form, and function of communicative acts. Available evidence shows that highly structured behavioral methods have important positive consequences for these children, particularly in eliciting first words. However, the limitation of these methods in maintenance and generalization of skills suggests that many children with autism will need to have these methods supplemented with less adult-directed activities to increase communicative initiation and carry over learned skills to

new settings and communication partners. Providing opportunities for mediated peer interactions with trained peers in natural settings seems to be especially important in maximizing the effects of this intervention.

Social Skills Training for Youth with Autism Spectrum Disorders

857

Scott Bellini and Jessica K. Peters

Social skill deficits are a pervasive and enduring feature of autism spectrum disorders (ASD). As such, social skills training (SST) should be a critical component of programming for youth with ASD. A number of SST strategies exist, including those employing social stories, video modeling interventions, social problem solving, pivotal response training, scripting procedures, computer-based interventions, priming procedures, prompting procedures, and self-monitoring. This article summarizes each intervention strategy and provides results from several research studies. Social skills assessment is a crucial first step to SST, and a number of assessment measures are described. Meta-analytic reviews of the research provide further recommendations for successful SST programs.

Behavioral Assessment and Treatment of Self-Injurious Behavior in Autism

875

Noha F. Minshawi

Self-injurious behaviors (SIB) are common in individuals who have autism and related developmental disabilities. When an individual engages in SIB, these behaviors frequently become the primary treatment target because of the potential for injury. A thorough behavioral assessment aimed at determining the function of the behaviors is the first step to developing a treatment plan. This article presents a brief background of SIB and a discussion of the behavioral assessment and treatment of these behaviors to familiarize readers with the behavioral perspective on SIB in individuals who have autism and other developmental disabilities.

Assessment and Behavioral Treatment of Feeding and Sleeping Disorders in Children with Autism Spectrum Disorders

887

Tiffany Kodak and Cathleen C. Piazza

Children diagnosed with autism or autism spectrum disorders (ASD) are more likely than other children to exhibit behaviors characteristic of a feeding or sleeping disorder. Parents of children with these disorders may be extremely concerned about the health and safety of their child. Sleeping and feeding problems can cause a great deal of stress to parents and other family members. Behavioral assessment and treatment procedures have been developed to address behavior problems related to sleeping and feeding disorders. This article reviews the literature about assessment and

treatment, and provides recommendations regarding services to family members of individuals diagnosed with ASD and feeding or sleeping disorders.

**Bridging for Success in Autism: Training and Collaboration
Across Medical, Educational, and Community Systems**

907

Naomi Swiezy, Melissa Stuart, and Patricia Korzekwa

The basis for the need for improved training and collaboration models in the field of autism is supported through historical background and literature in related fields. Ultimately, training specific to autism spectrum disorders and related evidence-based practices is proposed as necessary for all care providers having influence on programming related to this special population. It is also posited that the most effective avenue for training is through models incorporating more intensive and interactive training processes such as hands-on learning activities with opportunities for coaching, modeling, practice and feedback. Effective collaboration across systems (including home, medical, educational, and community settings) is emphasized to facilitate consistency in implementation of strategies for ultimate program success.

Index

923