

CNS SPECTRUMS®

THE INTERNATIONAL JOURNAL OF NEUROPSYCHIATRIC MEDICINE



EXPERT ROUNDTABLE SUPPLEMENT

BEST PRACTICES IN ADULT ADHD: SPECIAL CONSIDERATIONS

AUTHORS

Lenard A. Adler, MD
Jeffrey H. Newcorn, MD
Thomas J. Spencer, MD
Mark A. Stein, PhD

ABSTRACT

The treatment of adult attention-deficit/hyperactivity disorder (ADHD) is not without potential complications. Concerns exist regarding the cardiovascular safety of ADHD medications. The vulnerability of ADHD patients to cardiovascular problems may be unclear during diagnosis, and can require close attention by the physician before and during treatment. ADHD may be obscured by the presence of mimics, conditions responsible for symptoms or impairments that look like, and may be confused for, ADHD. Mimics can divert attention away from the real underlying disorder and can compel a physician to prescribe unnecessary treatment. There is also concern about the potential for diversion and misuse of ADHD medications. To avoid these possible complications, clinicians must screen patients for preexisting cardiovascular events and family history of cardiac dysfunction. The American Heart Association has recently published guidelines for cardiovascular monitoring for children and adolescents who are receiving psychostimulant therapy. To rule out the possibility of medical or psychiatric mimics, diagnosis must be thoughtful and thorough. Neuropsychiatric testing may help identify certain mimic conditions. Though it appears that rates of stimulant abuse are not higher among treated ADHD patients compared to the general population, physicians must be vigilant about the possibility of misuse among their patients.

In the final segment of a 3-part Expert Roundtable Supplement series on Best Practices in Adult ADHD, Lenard A. Adler, MD, offers an introduction to the special considerations in treating adult ADHD; Jeffrey H. Newcorn, MD, reviews issues in safety and cardiovascular risk for ADHD patients; Thomas J. Spencer, MD, reviews data on the diversion and misuse of stimulant medications; and Mark A. Stein, PhD, discusses conditions that mimic or present co-morbid with ADHD as well as neuropsychological testing.



This activity is jointly sponsored by the Mount Sinai School of Medicine and MBL Communications, Inc.



Index Medicus citation: *CNS Spectr*

<https://doi.org/10.1177/10928529083239> Published online by Cambridge University Press

© MBL Communications, Inc.

www.cnspectrums.com

Accreditation Statement

This activity has been planned and implemented in accordance with the Essentials and Standards of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Mount Sinai School of Medicine and MBL Communications, Inc. The Mount Sinai School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.



Credit Designation

The Mount Sinai School of Medicine designates this educational activity for a maximum of 2 *AMA PRA Category 1 Credit(s)*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Faculty Disclosure Policy Statement

It is the policy of the Mount Sinai School of Medicine to ensure objectivity, balance, independence, transparency, and scientific rigor in all CME-sponsored educational activities. All faculty participating in the planning or implementation of a sponsored activity are expected to disclose to the audience any relevant financial relationships and to assist in resolving any conflict of interest that may arise from the relationship. Presenters must also make a meaningful disclosure to the audience of their discussions of unlabeled or unapproved drugs or devices. This information will be available as part of the course material.

This activity has been peer reviewed and approved by James C.-Y. Chou, MD, associate professor of psychiatry at the Mount Sinai School of Medicine. Review Date: October 2, 2008.

Statement of Need and Purpose

There are numerous reasons to treat attention-deficit/hyperactivity disorder in adults, including to minimize impairment from core symptoms, to alter the course of co-morbid disorders, and to prevent deterioration. However, the treatment of adult ADHD is not without potential complications. While ADHD medications are generally considered to be safe, concerns exist regarding the cardiovascular safety of certain medications. The issue of sudden cardiac death is all the more important in adults treated with stimulants, as adults are generally thought to be more at risk for underlying cardiovascular illness, including hypertension, arrhythmia and cardiac ischemia. The vulnerability of ADHD patients to cardiovascular problems require close attention by the physician before and during treatment. Other considerations in the treatment of adult ADHD include the potential for abuse, misuse, or diversion of ADHD medications and the presence of medical or psychiatric conditions that mimic ADHD. The diagnosis of adult ADHD is predicated on certainty that the symptoms of inattention and/or hyperactivity-impulsivity are not better explained by another disorder. This requirement is often thought to focus on co-morbid mental health disorders, such as mood disorders or substance use disorders. However, several medical conditions, such as thyroid disorders, obesity, sleep disorders, and seizure disorders can also present with similar symptoms. It is important for clinicians to be educated on the latest methods and guidelines used to avoid such complications, such as appropriate screening for preexisting cardiovascular events and family history of cardiac dysfunction; thorough diagnoses to rule out medical or psychiatric mimics; and appropriate care and monitoring of patients at risk for abuse, misuse, or diversion of their medications.

Target Audience

This activity is designed to meet the educational needs of psychiatrists.

Learning Objectives

- Discuss the potential cardiovascular risks of ADHD treatments and appropriate screening methods to identify at-risk patients.
- Distinguish between abuse, misuse, and diversion of medications, and discuss how these problems pertain to patients with ADHD.
- Review the conditions that tend to simulate ADHD and methods of ruling out these conditions at the early stages of diagnosis.

Faculty Disclosures

Lenard A. Adler, MD, is a consultant to and on the advisory boards of Abbott, Cephalon, Cortex, Eli Lilly, Novartis, Ortho-McNeil/Janssen/Johnson and Johnson, Merck, New River, Organon, Pfizer, Psychogenics, sanofi-aventis, and Shire; is on the speaker's bureaus of Eli Lilly and Shire; and receives grant/research support from Abbott, Bristol-Myers Squibb, Cephalon, Cortex, Eli Lilly, Janssen, Johnson and Johnson, Merck, the National Institute of Drug Abuse, New River, Novartis, Ortho-McNeil, Pfizer, and Shire.

Jeffrey H. Newcorn, MD, is a consultant to Abbott, Biobehavioral Diagnostics, Eli Lilly, Lupin, Novartis, Ortho-McNeil, Psychogenics, sanofi-aventis, and Shire; and receives research support from Eli Lilly and Ortho-McNeil.

Thomas J. Spencer, MD, is a speaker for Eli Lilly, GlaxoSmithKline, Janssen, Novartis, Ortho-McNeil, and Shire; is on the advisory boards of Cephalon, Eli Lilly, GlaxoSmithKline, Janssen, Novartis, Ortho-McNeil, Pfizer, and Shire; and receives research support from Cephalon, Eli Lilly, GlaxoSmithKline, Janssen, the National Institute of Mental Health, Novartis, Ortho-McNeil, Pfizer, and Shire.

Mark A. Stein, PhD, is a consultant/advisor to Abbott, Novartis, and Pfizer; is a speaker for Novartis and Ortho-McNeil; and receives research support from Eli Lilly, the National Institute of Mental Health, Novartis, Organon, Ortho-McNeil, and Pfizer.

Acknowledgment of Commercial Support

Funding for this activity has been provided by an educational grant from Shire Pharmaceuticals Inc.

Peer Reviewer

James C.-Y. Chou, MD, has received honoraria from AstraZeneca, Bristol-Myers Squibb, Eli Lilly, Janssen, and Pfizer.

To Receive Credit for this Activity

Read this Expert Roundtable Supplement, reflect on the information presented, and complete the CME posttest and evaluation on pages 19 and 20. To obtain credit, you should score 70% or better. Early submission of this posttest is encouraged. Please submit this posttest by October 1, 2010 to be eligible for credit.

Release date: October 1, 2008

Termination date: October 31, 2010

The estimated time to complete this activity is 2 hours.

A related audio CME PsychCast[™] will also be available online in November 2008 at:

cmepsychcast.mblcommunications.com and via iTunes.

EDITORS

EDITOR

Eric Hollander, MD
Mount Sinai School of Medicine
New York, NY

INTERNATIONAL EDITOR

Joseph Zohar, MD
Chaim Sheba Medical Center
Tel-Hashomer, Israel

ASSOCIATE INTERNATIONAL EDITORS

EUROPE

Donatella Marazziti, MD
University of Pisa
Pisa, Italy

MID-ATLANTIC

Dan J. Stein, MD, PhD
University of Cape Town
Cape Town, South Africa

ASIA

Shigefo Yamawaki, MD, PhD
Hiroshima University School
of Medicine Hiroshima, Japan

CME COURSE DIRECTOR

James C.-Y. Chou, MD

NEUROLOGISTS

Mitchell F. Brin, MD
University of California, Irvine
Irvine, CA

Jeffrey L. Cummings, MD
University of California, Los Angeles
Los Angeles, CA

Jerome Engel, Jr., MD, PhD
University of California, Los Angeles
Los Angeles, CA

Mark S. George, MD
Medical University of South Carolina
Charleston, SC

Richard B. Lipton, MD
Albert Einstein College of Medicine
Bronx, NY

EDITORIAL ADVISORY BOARD

C. Warren Olanow, MD, FRCP
Mount Sinai School of Medicine
New York, NY

Steven George Pavlakis, MD
Maimonides Medical Center
Brooklyn, NY

Stephen D. Silberstein, MD, FACP
Thomas Jefferson University
Philadelphia, PA

Michael Trimble, MD, FRCP, FRPsych
National Hospital for Neurology
and Neurosurgery
London, United Kingdom

PSYCHIATRISTS

Dennis S. Charney, MD
Mount Sinai School of Medicine
New York, NY

Dwight L. Evans, MD
University of Pennsylvania
Philadelphia, PA

Siegfried Kasper, MD
University of Vienna
Vienna, Austria

Martin B. Keller, MD
Brown Medical School
Providence, RI

Lorin M. Koran, MD
Stanford University School of Medicine
Stanford, CA

Yves Lecrubier, MD
Hôpital de la Salpêtrière
Paris, France

Herbert Y. Meltzer, MD
Vanderbilt University Medical Center
Nashville, TN

Stuart A. Montgomery, MD
St. Mary's Hospital Medical School
London, United Kingdom

Charles B. Nemeroff, MD, PhD
Emory University School of Medicine
Atlanta, GA

Humberto Nicolini, MD, PhD
National Mexican Institute of Psychiatry
Mexico City, Mexico

Stefano Pallanti, MD, PhD
University of Florence
Florence, Italy

Katharine Phillips, MD
Brown Medical School
Providence, RI

Harold A. Pincus, MD
Columbia University
New York, NY

Scott L. Rauch, MD
Massachusetts General Hospital
Charlestown, MA

Alan F. Schatzberg, MD
Stanford University School of Medicine
Stanford, CA

Thomas E. Schlaepfer, MD
University of Bonn
Bonn, Germany

Stephen M. Stahl, MD, PhD
University of California, San Diego
La Jolla, CA

Norman Sussman, MD
New York University Medical School
New York, NY

Michael E. Thase, MD
University of Pennsylvania School of Medicine
Philadelphia, PA

Madhukar H. Trivedi, MD
University of Texas Southwestern Medical Center
Dallas, TX

Karen Dineen Wagner, MD, PhD
The University of Texas Medical Branch
Galveston, TX

Herman G.M. Westenberg, MD
University Hospital Utrecht
Utrecht, The Netherlands

Stuart C. Yudofsky, MD
Baylor College of Medicine
Houston, TX

PUBLICATION STAFF

CEO & PUBLISHER

Darren L. Brodeur

VP, MANAGING EDITOR

Christopher Naccari

VP, SENIOR EDITOR

Deborah Hughes

VP, HUMAN RESOURCES

Kimberly A. Brodeur

SENIOR GLOBAL ACCOUNT DIRECTOR

Richard Ehrlich

GLOBAL ACCOUNT MANAGER

Evan Frieder

SENIOR EDITOR

José Ralat—*CNS Spectrums*

SENIOR ASSOCIATE EDITOR

Dena Croog—*Primary Psychiatry*

ASSOCIATE EDITORS

Lonnie Stoltzfoos—*Psychiatry Weekly*
Rebecca Zerzan

ASSISTANT EDITOR

Carlos Perkins, Jr.

SENIOR ACQUISITIONS EDITOR

Lisa Arrington

ACQUISITIONS EDITOR

Virginia Jackson

EDITORIAL INTERNS

Jaime Cunningham

Michélisa Lanche

CME DEVELOPMENT MANAGER

Shelley Wong

CME ADMINISTRATOR

Annette Schwind

ASSISTANT—ENDURING MATERIALS

Sonny Santana

ART DIRECTOR

Derek Oscarson

GRAPHIC DESIGNER

Michael J. Vodilko

CHIEF FINANCIAL OFFICER

John Spano

STAFF ACCOUNTANT

Diana Tan

ACCOUNTING INTERN

Stephanie Spano

SALES & EVENT COORDINATOR

Kimberly Schneider

RECEPTIONIST

Kimberly Forbes

INFORMATION TECHNOLOGY

Clint Bagwell Consulting

WEB INTERN

Adam Schwartz

CORPORATION COUNSEL

Lawrence Ross, Esq.
Bressler, Amery, and Ross

CNS Spectrums (ISSN 1092-8529) is published monthly by MBL Communications, Inc., 333 Hudson Street, 7th Floor, New York, NY 10013. Application to mail Periodicals postage rates is pending at New York, NY, and additional mailing offices. POSTMASTER: send address changes to *CNS Spectrums* c/o MMS, Inc., 185 Hansen Court, Suite 110, Wood Dale, IL 60191-1150.

Opinions and views expressed by authors are their own and do not necessarily reflect the views of the publisher, MBL Communications, Inc., *CNS Spectrums*, LLC, or the editorial advisory board.

Copyright © 2008 by MBL Communications, Inc. All rights reserved. Printed in the United States.