CNS SPECTRUMS®

THE INTERNATIONAL JOURNAL OF NEUROPSYCHIATRIC MEDICINE

EXPERT ROUNDTABLE SUPPLEMENT

ADULT ATTENTION-DEFICIT/HYPERACTIVITY DISORDER AND THE ROLE OF DEPRESSION

AUTHORS

Timothy E. Wilens, MD, Andrew A. Nierenberg, MD, Anthony L. Rostain, MD, and Thomas J. Spencer, MD

SECTION EDITOR

David L. Ginsberg, MD

ABSTRACT

Adult attention-deficit/hyperactivity disorder (ADHD) and depressive disorders have high overlapping prevalence rates. It is becoming increasingly clear that depression in individuals with ADHD is not an artifact of ADHD, nor is ADHD in individuals with depression an artifact of depression. The comorbidity of these disorders raises significant issues for diagnosis and treatment. Patients with both disorders often underreport their symptoms or have difficulty presenting a comprehensive picture of their conditions. To make an accurate diagnosis, clinicians must conduct a cognitive assessment accounting for both the patient's presenting complaints and history. In addition, patients' negative core beliefs and views must be assessed at diagnosis and addressed in the comprehensive treatment approach. In the treatment algorithm for both disorders, physicians should prioritize the worse condition. However, because depression is often viewed as the worse condition, physicians may be reluctant to treat comorbid ADHD. Physicians must recognize that comorbid ADHD carries a host of additional academic, occupational, and cognitive symptoms that demand treatment simultaneous to or following treatment for depression. Combined pharmacotherapy for ADHD and comorbid depression is often necessary and should be seriously considered. Approved pharmacologic treatments include stimulants and nonstimulants, while experimental treatments include antidepressants and arousal agents.

In this Expert Roundtable Supplement, Andrew A. Nierenberg, MD, discusses the epidemiology of depression and the neurologic theories behind depression and its treatment; Anthony L. Rostain, MD, explains the prevalence and clinical presentation of adult ADHD and comorbid depression; Timothy E. Wilens, MD, provides an overview of pharmacotherapy for comorbid adult ADHD and depression; and Thomas J. Spencer, MD, discusses treatment options for patients with these comorbid conditions.



MBL

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

EXPERT ROUNDTABLE SUPPLEMENT

An expert panel review of clinical challenges in psychiatry

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 MOUNT SINAI Sinai School of Medicine is accredited by the ACCME to MEDICINE 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)TM. 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 Eric Hollander, MD, Chair and Professor of Psychiatry at the Mount Sinai School of Medicine. Review Date: April 23, 2008.

Statement of Need and Purpose

Although attention-deficit/hyperactivity disorder (ADHD) has traditionally been considered a pediatric disorder, up to 65% of children with a diagnosis of ADHD continue to display behavioral problems and symptoms of the disorder into their adult lives. Adults with ADHD demonstrate functional impairments in multiple domains, often including poor educational performance, occupational problems, and relationship difficulties. Accurate diagnosis of ADHD in adults is challenging and requires careful consideration of other psychiatric and medical disorders that may mimic symptoms of the disorder. The majority of adults with ADHD exhibit at least one comorbid psychiatric disorder, which may confound a proper ADHD diagnosis. Comorbidity between ADHD and major depressive disorder has been reported from both epidemiologic and clinical studies of both children and adults. Stimulants and noradrenergic and dopaminergic antidepressants have been shown to be useful medical interventions for adult ADHD. Cognitive-behavioral skills training and psychotherapy are useful adjuncts to pharmacotherapy. Devising a treatment plan for comorbid adult ADHD requires careful consideration, and treating the depression may improve ADHD symptoms such as inattention and irritability. Education is needed to increase the detection and treatment of adult ADHD and research is necessary to determine whether effective treatment would reduce the onset, persistence, and severity of disorders that co-occur with adult ADHD.

Target Audience

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

Learning Objectives

· Evaluate recent research on the genetic and biologic evidence for associations between attention-deficit/hyperactivity disorder (ADHD) and depression.

· Assess the treatments that would benefit patients with ADHD and comorbid depression and the risks of treating this patient subgroup.

Faculty Disclosures

Timothy E. Wilens, MD, is associate professor of psychiatry in the Department of Psychiatry at Harvard Medical School and director of substance abuse services in the Clinical and Research Program in Pediatric Psychopharmacology at Massachusetts General Hospital in Boston. Dr. Wilens is a consultant for Abbott, Cephalon, Eli Lilly, Ortho-McNeil, Merck, the National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA), Novartis, and Shire; is on the speaker's bureaus of Ortho-McNeil, Novartis, and Shire; and receives grant support from Abbott, Eli Lilly, Ortho-McNeil, Merck, NIH, NIDA, and Shire. Dr. Wilens' presentation includes discussion of unapproved/investigational uses of treatments for adult attention-deficit/hyperactivity disorder.

Andrew A. Nierenberg, MD, is associate director of the Depression Clinical and Research Program at Massachusetts General Hospital and professor of psychiatry at Harvard Medical School in Boston. Dr. Nierenberg is a consultant to or serves on the advisory boards of AstraZeneca, Brain Cells, Bristol-Myers Squibb, Eli Lilly, Jazz, Merck, the National Institute of Mental Health (NIMH), Novartis, and Schering-Plough; and receives research support from the NIMH and Pfizer.

Anthony L. Rostain, MD, is professor of psychiatry and pediatrics and director of the Adult ADHD Treatment and Research Program at the University of Pennsylvania School of Medicine in Philadelphia. Dr. Rostain has received honoraria from Eli Lilly and Ortho-McNeil; and serves on the advisory board of Shire.

Thomas J. Spencer, MD, is associate professor of psychiatry at Harvard Medical School and associate director of the Clinical and Research Program in Pediatric Psychopharmacology at Massachusetts General Hospital in Boston. Dr. Spencer is on the advisory boards of Cephalon, Eli Lilly, GlaxoSmithKline, McNeil, Novartis, Pfizer, and Shire; is on the speaker's bureaus of Eli Lilly, GlaxoSmithKline, Ortho-McNeil, Novartis, and Shire; and receives research support from Cephalon, Eli Lilly, GlaxoSmithKline, Ortho-McNeil, Novartis, and Shire. Dr. Spencer's presentation includes discussion of unapproved/investigational uses of atomoxetine, fluoxetine, paroxetine, and venlafaxine.

Acknowledgment of Commercial Support

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

Peer Reviewers

David L. Ginsberg, MD, receives honoraria from AstraZeneca and GlaxoSmithKline.

Eric Hollander, MD, reports no affiliation with or financial interest in any organization that may pose a conflict of interest.

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 May 1, 2010 to be eligible for credit. Release date: May 1, 2008; Termination date: May 31, 2010

The estimated time to complete this activity is 2 hours.

A related audio CME PsychCastTM will also be available online in June 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 Shigeto Yamawaki, MD, PhD Hiroshima University School of Medicine Hiroshima, Japan

CONTRIBUTING WRITERS

Andrew A. Nierenberg, MD, Anthony L. Rostain, MD Thomas J. Spencer, MD Timothy E. Wilens, MD

FIELD EDITOR Michael Trimble, MD, FRCP, FRPsych

COLUMNISTS
Uriel Halbriech, MD
Stefano Pallanti, MD, PhD Thomas E. Schlaepfer, MD Stephen M. Stahl, MD, PhD Dan J. Stein, MD, PhD

MEDICAL REVIEWER David L. Ginsberg, MD

CME COURSE DIRECTOR

Eric Hollander, MD

EDITORIAL ADVISORY BOARD

NEUROLOGISTS

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

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

C. Warren Olanow, MD, FRCPC 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

Lorrin 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

GRAPHIC DESIGNER
Michael J. Vodilko

STAFF ACCOUNTANT

ACCOUNTING INTERN Stephanie Spano

SALES & EVENT COORDINATOR

CHIEF FINANCIAL OFFICER

PUBLICATION STAFF

CEO & PUBLISHER

Darren I. Brodeur

VP, MANAGING EDITOR

Christopher Naccari

VP, SENIOR EDITOR Deborah Hughes

VP, BUSINESS DEVELOPMENT

Michael J. Stevinson

VP, HUMAN RESOURCES

Kimberly A. Brodeur

SENIOR GLOBAL ACCOUNT DIRECTOR

SENIOR ACCOUNT DIRECTOR

ACCOUNT MANAGER

SENIOR EDITORS

Peter Cook—Psychiatry Weekly José Ralat—CNS Spectrums

SENIOR ASSOCIATE EDITORDena Croog—*Primary Psychiatry*

ASSOCIATE EDITOR

Lonnie Stoltzfoos—Psychiatry Weekly

ASSISTANT EDITORS

Carlos Perkins, Jr Rebecca Zerzan

SENIOR ACQUISITIONS EDITOR

Lisa Arrington

ACQUISITIONS EDITOR

Virginia Jackson

EDITORIAL INTERNS

Jaime Cunningham Michelisa Lanche

ASSISTANT—ENDURING MATERIALS

ART DIRECTOR Derek Oscarsor

CME DEVELOPMENT MANAGER

Lauren Webb

John Spano

Diana Tan

RECEPTIONISTS Kimberly Forbes

Ronald Means

Kimberly Schneider

OFFICE MANAGER

INFORMATION TECHNOLOGY

Clint Bagwell Consulting

WEB INTERN

CORPORATION COUNSEL Lawrence Ross, Esq.

Bressler, Amery, and Ross



Publishers of





