Academic Supplement

New Developments in Obsessive-Compulsive and Spectrum Disorders

Cross-National Epidemiology of Obsessive-Compulsive Disorder M. M. Weissman

Uncomplicated and Comorbid Obsessive-Compulsive Disorder in an Epidemiologic Sample E. Hollander, S. Greenwald, D. Neville, et al.

OCD: Perspectives on the Next Millennium From the Adult OCD Research Unit, NIMH Intramural Research Program D. L. Murphy, G. Corá-Locatelli, B. D. Greenberg

Obsessive-Compulsive Disorder in Children and Adolescents
M. A. Riddle

New Biological Models of OCD: Implications of Subtypes

D. Marazziti

Neuroimaging in OCD: Clinical Implications
S. L. Rauch

Transcranial Magnetic Stimulation as a Probe and Potential Treatment in Obsessive-Compulsive Disorder

B. D. Greenberg, G. Corá-Locatelli, E.M. Wasserman, et al.

Psychopharmacology of Obsessive-Compulsive Disorder S. A. Montgomery

"Schizo-Obsessive" Subtype: Obsessions and Delusions J. Zohar, Y. Sasson, M. Chopra, et al.

Seven Deadly Sins and OCD
D. J. Stein

Psychosocial Function and Economic Costs of Obsessive-Compulsive Disorder E. Hollander, D. J. Stein, J.H. Kwon, et al.

The International Journal of Neuropsychiatric Medicine

3rd IOCDC: Third International Obsessive Compulsive Disorder Conference



Preliminary Programme

1. Epidemiology—Cross Culture and Economy

Chair: M. Weissman (USA)
Co-ordinators: A Okasha (Egypt)

Participants: S. Khana (India); D. Stein (S. Africa);

J. Angst (Switzerland); S.A. Rasmussen (USA); D. Black (USA); E. Hantouche (France); E. Hollander (USA); E. Susser (USA);

T. Ulstun (Switzerland)

2. Childhood and OCD

Chair: M. Riddle (USA)

Co-ordinators: S. Swedo (USA)

Participants: A. Weizman (Israel); C. Cartwright (USA);

J. March (USA); M. Flament (France); J.F. Leckman (USA); L. Cohen (USA); J Piacentini (USA); D.L. Pauls (USA)

3. OCD Spectrum – Schizo-Obsessive Subtypes

Chair: E. Hollander (USA)

Co-ordinators: G. Cassano (Italy)

Participants: J.L. Carrasco Perera (Spain); D. Black (USA);

S. McElroy (USA); C. Decaria (USA); J. Cottraux (France); J. Eisen (USA); Y. Sasson (Israel); J.A. Yaryura-Tobias (USA); K. Phillips (USA); M. Pato (USA)

4. Genetics - Molecular Biology

Chair: D. Pauls (USA)

Co-ordinators: C. Pato (USA)

Participants: L. Bellodi (Italy); J. Kennedy (Canada);

M. Pato (USA); H. Nicolini (Mexico); D. Goldman (USA); J. Piacentini (USA); D. Marazziti (Italy); D. Murphy (USA);

J.F. Leckman (USA)

5. Neuroimaging - Neurocircuits

Chair: S. Rauch (USA)

Co-ordinators: N. Swerdlow (USA)

Participants: S.R. Dager (USA); S. Saxena (USA); L.R. Baxter (USA); E. Hollander (USA); J. Zohar (Israel); B. Greenberg (USA); M. Laruelle (USA); T. Hendler (Israel); D. Rosenberg (USA); P. Mindus (Sweden);

E. Smeraldi (Italy)

6. CBT and Integrated Approaches

Chair: F. Hohagen (Germany)
Co-ordinators: J. March (USA)

Participants: F. Neziroglu (USA); J. Schwartz (USA); G. Steketee (USA); J. Cottraux (France);

J. Kennedy (Canada); H. Hermesh (Israel); J. Piacentini (USA); J. Greist (USA)

7. Treatment - Experimental Pharmacology

Chair: D. Marazziti (Italy)

Co-ordinators: D. Murphy (USA)

Participants: J.F. Leckman (USA); P. Blier (Canada);

M. Arato (Hungary); H. Westenberg (Netherlands); J. Cottraux (France); K.P. Lesch (Germany)

8. Treatment – State of the Art

Chair: S. Montgomery (USA)

Co-ordinators: J. Zohar (Israel)

Participants: L. Ravizza (Italy); M.L. Figueira (Portugal);

J. Saiz Ruiz (Spain); L. Koran (USA);

B. Greenberg (USA); W.K. Goodman (USA);

E.C. (Brazil); M. Bourgeois (France); M. Ansseau (Belgium); E. Smeraldi (Italy);

J.P. Lepine (France)

This supplement, New Developments in Obsessive-Compulsive and Spectrum Disorders, is a collection of condensed reviews and original research culled from the planning meeting in Westchester, NY, on December 5, for the Third International Obsessive Compulsive Disorder conference, Madeira, Portugal, on September 11-12, 1998. This supplement should be viewed as the first of two parts. An additional work will be culled from the meeting itself.

DISCLAIMER

Funding for this supplement has been provided through an unrestricted educational grant by Solvay Pharmaceuticals and Pharmacia & Upjohn. Sponsorship of this review does not imply the sponsor's agreement with the views expressed herein. Although every effort has been made to ensure that drug usage and other information are presented accurately in this publication, the ultimate responsibility rests with the prescribing physician. Neither the publishers, the sponsors, nor the authors can be held responsible for errors or for any consequences arising from the use of information contained herein. Readers are strongly urged to consult any relevant primary literature. No claims or endorsements are made for any drug or compound at present under clinical investigation.

Copyright © 1998, MBL Communications, Inc., 665 Broadway, New York, NY 10012. Printed in the USA. All rights reserved, including the right of reproduction, in whole or in part, in any form.

CNS SPECTRUMS

The International Journal of Neuropsychiatric Medicine

EDITOR

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

INTERNATIONAL EDITOR

Joseph Zohar, MD Chaim Sheba Medical Center Tel Aviv, Israel

ASSOCIATE INTERNATIONAL EDITOR

Donatella Marazziti, MD University of Pisa Pisa, Italy

EDITORIAL DIRECTOR

James La Rossa Jr. **BOARD OF ADVISORS**

Margaret Altemus, MD Cornell University Medical Center New York, NY

Scott Atlas, MD

Mount Sinai School of Medicine New York, NY

Mitchell F. Brin, MD

Mount Sinai School of Medicine New York, NY

John Caronna, MD

New York Hospital-Cornell Medical Center, New York, NY

Dennis S. Charney, MD

Yale University New Haven, CT

Emil F. Coccaro, MD

MCP at EPPI Philadelphia, PA

Jeffrey L. Cummings, MD

University of California Los Angeles, CA

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

Mark George, MD

Medical University of South Carolina Charleston, SC

Jack Gorman, MD

College of Physicians and Surgeons, Columbia University New York, NY

Steven Hyman, MD

National Institute of Mental Health Bethesda, MD

Thomas R. Insel, MD

Yerkes Primate Labs **Emory University School of Medicine** Atlanta, GA

Michael A. Jenike, MD

Massachusetts General Hospital Charlestown, MA

Lorrin M. Koran, MD

Stanford University Medical School Stanford, CA

James Leckman, MD

Yale University New Haven, CT

Herbert Y. Meltzer, MD

Vanderbilt University Medical Center Nashville, TN

Stuart A. Montgomery, MD

St. Mary's Hospital Medical School London, United Kingdom

Dennis L. Murphy, MD

National Institute of Mental Health Bethesda, MD

Charles B. Nemeroff, MD, PhD

Emory University School of Medicine Atlanta, GA

Katharine Phillips, MD

Brown University Providence, RI

Harold A. Pincus, MD

American Psychiatric Association Washington, DC

Stanley I. Rapoport, MD

National Institute of Mental Health Bethesda, MD

Alan Schatzberg, MD

Stanford University Medical School Stanford, CA

Norman Sussman, MD

New York University Medical School New York, NY

Michael R. Trimble, MD

National Hospital for Neurology and Neurosurgery London, United Kingdom

H.M. van Praag, MD

University of Maastricht Maastricht, The Netherlands

Herman G.M. Westenberg, MD

University Hospital Utrecht Utrecht, The Netherlands

Richard Wyatt, MD

National Institute of Mental Health Bethesda, MD

Stuart Yudofsky, MD

Baylor College of Medicine Houston, TX

CONTRIBUTORS

Dan I. Stein, MB

University of Stellenbosch Tygerberg, South Africa

MBL COMMUNICATIONS

CEO & PUBLISHER

James La Rossa Jr.

PRESIDENT & ASSOCIATE PUBLISHER

Darren L. Brodeur

MANAGING EDITOR Linda Thrasybule

ASSOCIATE EDITORS

Claire R. Roberts Bernilyn A. Isaac

PUBLISHING ASSOCIATES

David A. Kirschenbaum Genevieve Romano

COPY EDITORS

Lauren A. Cerruto Michelle Cervone, MD Walter Gelles

Ionathan Lee

EDITORIAL ASSISTANT Karen J. Jaffe

ADMINISTRATIVE ASSISTANT

Leelawatee Ramadhin

ART DIRECTOR

Anthony J. Korsak

CONTROLLER Deborah P. Gomez

CORPORATION COUNSEL

Kevin F. Saer, Esq. Lankenau Kovner & Kurtz

OF COUNSEL

Susan G. La Rossa, Esq. Putney, Twombly, Hall & Hirson

CNS SPECTRUMS

The International Journal of Neuropsychiatric Medicine

Volume 3 • Number 5 Supplement 1 May 1998

For editorial and advertising inquiries, please fax 212-328-0600.

Opinions and views expressed by authors are their own and do not necessarily reflect the views of the publisher, MBL Communications, or the editorial advisory board. Advertisements in CNS Spectrums are accepted on the basis of adherence to ethical medical standards, but acceptance does not imply endorsement by CNS Spectrums, or the publisher.

CNS Spectrums is a trademark of CNS Spectrums, LLC, New York, NY.

Permission to reproduce articles in whole or part must be obtained in writing from the publisher. Copyright ©1998 by MBL Communications. All rights reserved. Printed in the United States.



An **B** Journal

Medical Broadcast Limited

Table of Contents

6 Cross-National Epidemiology of Obsessive-Compulsive Disorder

By Myrna M. Weissman, PhD

10 Uncomplicated and Comorbid Obsessive-Compulsive Disorder in an Epidemiologic Sample

By Eric Hollander, MD, Steven Greenwald, MA, David Neville, MD, Jim Johnson, PhD, Christopher D. Hornig, MA, and Myrna M. Weissman, PhD

19 OCD: Perspectives on the Next Millennium From the Adult OCD Research Unit, NIMH Intramural Research Program

By Dennis L. Murphy, MD, Gabriela Corá-Locatelli, MD, and Benjamin D. Greenberg, MD, PhD

21 Obsessive-Compulsive Disorder in Children and Adolescents

By Mark A. Riddle, MD

24 New Biological Models of OCD: Implications of Subtypes

By Donatella Marazziti, MD, PhD

26 Neuroimaging in OCD: Clinical Implications By Scott L. Rauch, MD

30 Transcranial Magnetic Stimulation as a Probe and Potential Treatment in Obsessive-Compulsive Disorder

By Benjamin D. Greenberg, MD, PhD, Gabriela Corá-Locatelli, MD, Eric M. Wassermann, MD, Ulf Ziemann, MD, and Dennis L. Murphy, MD

33 Psychopharmacology of Obsessive-Compulsive Disorder

By Stuart A. Montgomery, MD, MBBS, FRCPsych

38 "Schizo-Obsessive" Subtype: Obsessions and Delusions By Joseph Zohar, MD, Yuda Sasson, MD, Miriam Chopra, Yalian Inacu, MD,

By Joseph Zohar, MD, Yuda Sasson, MD, Miriam Chopra, Yalian Inacu, MD, and Raz Gross, MD

40 Seven Deadly Sins and OCD

By Dan J. Stein, MB

48 **Psychosocial Function and Economic Costs** of Obsessive-Compulsive Disorder

By Eric Hollander, MD, Dan J. Stein, MB, Jee H. Kwon, Clayton Rowland, PhD, Cheryl M. Wong, MD, James Broatch, MSW, and Carol Himelein, RPh

The IOCDC Tradition

By Eric Hollander, MD, Joseph Zohar, MD, and Donatella Marazziti, MD, PhD

On behalf of the International Organizing Committee of the Third International Obsessive Compulsive Disorder Conference (3rd IOCDC) including Eric Hollander, MD, Joseph Zohar, MD, and Donatella Marazziti, MD, PhD, it gives us great pleasure to welcome you to this special Academic Supplement of CNS Spectrums—New Developments in Obsessive Compulsive and Spectrum Disorders. The 11 papers in this journal were derived from the planning meeting of the 3rd IOCDC held in Westchester, New York, on Friday, December 5, 1997. This lively discussion among the workshop chairs helped to reshape the program for the upcoming 3rd IOCDC—to be held in Madeira, Portugal, September 11–12, 1998.

In concurrence with the tradition of International Obsessive Compulsive Disorder Conferences, this upcoming meeting is being held on a remote and hard-to-reach tropical island. The 1st IOCDC was held in Capri, Italy in March, 1993, and resulted in the book Current Insights in Obsessive Compulsive Disorder, edited by Drs. Hollander, Zohar, Marazziti, and Olivier, and published by John Wiley & Sons of Chichester, UK in 1994. The 2nd IOCDC was held in Guadeloupe, French West Indies, in February, 1996, and resulted in the first two Academic Supplements which helped launch CNS Spectrums (1996;1[1/2]).

We would like to acknowledge the generous support and unrestricted educational grants from Solvay Pharmaceuticals and Pharmacia & Upjohn for both the IOCDC mission, and for this Academic Supplement in CNS Spectrums. Special mention of Jack Redmond and David Dodd of US Solvay Pharmaceuticals and Chantel Vekens of Solvay Pharmaceuticals International is well deserved. We are proud of the fact that the IOCDC mission will now progress to an annual closed meeting, bringing together the world's experts in obsessive-compulsive disorder (OCD) to generate new hypotheses and synthesize the latest research findings in the field.

The 3rd IOCDC will constitute eight closed workshops that focus on epidemiology, childhood OCD and immune function, the OCD spectrum, genetics/molecular biology, neuroimaging, behavior therapy,

and experimental pharmacology and treatment. We are pleased to be able to set the tone of the 3rd IOCDC meeting in Madeira, Portugal, with this special supplement in CNS Spectrums. We plan to communicate more of the exciting syntheses and hypotheses that are derived from the workshops of the 3rd IOCDC in an additional CNS Spectrums supplement to be published shortly after the meeting. In the meantime, please enjoy the abundance of riches in OCD included in this issue. These include articles on cross-national epidemiology, uncomplicated and comorbid OCD, the next millennium, new biological models and subtypes, neuroimaging, transcranial magnetic stimulation, schizo-obsessive subtype, the seven deadly sins and OCD, psychopharmacology, childhood OCD, and the economic costs of OCD. CXS

Regards,

Eric Hollander, MD New York

Joseph Zohar, MD Tel Hashomer

Donatella Marazziti, MD, PhD Pisa "We plan to communicate more of the exciting syntheses and hypotheses that are derived from the workshops of the 3rd IOCDC in an additional CNS Spectrums supplement to be

published shortly after

the meeting."

Dr. Hollander is professor of psychiatry and director of the Compulsive, Impulsive, and Anxiety Disorders Program at Mount Sinai School of Medicine in New York City, and editor of CNS Spectrums.

Dr. Zohar is psychiatrist in the Obsessive-Compulsive Clinic at Chaim Sheba Medical Center in Israel, and international editor of CNS Spectrums.

Dr. Marazziti is professor of psychiatry in the Department of Psychiatry, Neurobiology, Pharmacology, and Biotechnologies at University of Pisa in Italy, and associate international editor of CNS Spectrums.

/10.1017/S1092852900007112 Published online by Cambridge University Press

C N S S P E C T R U M S Volume 3 – Number 5(Suppl 1) • May 1998