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Information for Participants

Objectives: After evaluating a specific journal article, participants should be able to demonstrate an increase in their knowledge of clinical medicine. Participants should be able to understand the contents of a selected research or review article and to apply the new findings to their clinical practice.

Participants: This program is designed for all psychiatrists in clinical practice, residents in Graduate Medical Education programs, medical students interested in psychiatry, and other physicians who wish to advance their current knowledge of clinical medicine.

Explanation of How Physicians Can Participate and Earn Credit: In order to earn CME credit, subscribers should read through the material presented in the article. After reading the article, complete the CME quiz online at cme.psychiatryonline.org and submit your evaluation and study hours (up to 1 *AMA PRA Category 1 Credit*™).

Credits: The American Psychiatric Association designates this educational activity for a maximum of 1 *AMA PRA Category 1 Credit*™. Physicians should only claim credit commensurate with the extent of their participation in the activity. The American Psychiatric Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Information on Courses

Title: Copy Number Variations in Schizophrenia: Critical Review and New Perspectives on Concepts of Genetics and Disease
Faculty: Anne S. Bassett, M.D., Stephen W. Scherer, Ph.D., Linda M. Brzustowicz, M.D.
Affiliations: Clinical Genetics Research Program, Centre for Addiction and Mental Health, Toronto (A.S.B.); the Departments of Psychiatry (A.S.B.) and Molecular Genetics (S.W.S.), University of Toronto; the Division of Cardiology, Department of Medicine, University Health Network, Toronto (A.S.B.); the Centre for Applied Genomics and Program in Genetics and Genome Biology, Hospital for Sick Children, Toronto (S.W.S.); and the Department of Genetics, Rutgers University, Piscataway, N.J. (L.M.B).
Disclosures: All authors report no financial relationships with commercial interests.
Discussion of unapproved or investigational use of products*: No

Title: Dysregulation of Regional Endogenous Opioid Function in Borderline Personality Disorder
Faculty: Alan R. Prossin, M.D., Tiffany M. Love, Robert A. Koeppe, Ph.D., Jon-Kar Zubieta, M.D., Ph.D., Kenneth R. Silk, M.D.
Affiliation: Department of Psychiatry (A.R.P., J-K.Z., K.R.S.), the Molecular and Behavioral Neuroscience Institute (A.R.P., T.M.L.), and the Department of Radiology (R.A.K.), University of Michigan.
Disclosures: Dr. Zubieta has served on the speakers bureau for Eli Lilly. All other authors report no financial relationships with commercial interests.
Discussion of unapproved or investigational use of products*: No

Title: Efficacy of Meta-Cognitive Therapy for Adult ADHD
Faculty: Mary V. Solanto, Ph.D., David J. Marks, Ph.D., Jeanette Wasserstein, Ph.D., Katherine Mitchell, Psy.D., Howard Abikoff, Ph.D., Jose Ma. J. Alvir, Dr.P.H., Michele D. Kofman, Ph.D.
Affiliations: Department of Psychiatry, Mount Sinai School of Medicine, New York (M.V.S., D.J.M., J.W.); Montefiore Medical Center, Bronx, N.Y. (K.M.); NYU Child Study Center, New York (H.A.); Pfizer, Inc., New York (J.M.J.A.); Rockefeller University, New York (M.D.K.).
Disclosures: Dr. Solanto has served on the medical advisory board of Shire Pharmaceuticals and has served as a consultant and speaker for Ortho-McNeil-Janssen Pharmaceuticals. Dr. Abikoff has received research funding from NIMH, the Hughes, Lemberg, and Heckscher Foundations, Ortho-McNeil, Shire, and Eli Lilly, has served as a consultant to Shire, Eli Lilly, Cephalon, and Novartis, and has a financial interest in the Children's Organizational Skills Scale, published by Multi-Health Systems. Dr. Alvir is an employee of Pfizer. Drs. Marks, Wasserstein, Mitchell, and Kofman report no financial relationships with commercial interests.
Discussion of unapproved or investigational use of products*: Yes

* American Psychiatric Association policy requires disclosure by CME authors of unapproved or investigational use of products discussed in CME programs. Off-label use of medications by individual physicians is permitted and common. Decisions about off-label use can be guided by scientific literature and clinical experience.

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Estimated Time to Complete: 1 Hour
Begin date August 1, 2010 – End date July 31, 2012

EXAMINATION QUESTIONS

Select the single best answer for each question below.

Copy Number Variations in Schizophrenia: Critical Review and New Perspectives on Concepts of Genetics and Disease

Anne S. Bassett et al.
Am J Psychiatry 2010; 167:899-914

QUESTION 1. What statement is true with respect to clinical expression of major recurrent CNVs associated with schizophrenia?

A. Core phenotypes are similar for specific recurrent CNVs such as 22q11.2 deletions, 15q13.3 deletions, and 1q21.1 deletions.
B. The broad phenotypes of major recurrent CNVs in schizophrenia suggest that autism and epilepsy may be genetically related to schizophrenia.
C. Mental retardation is nearly always associated with 22q11.2 deletions, 15q13.3 deletions and 1q21.1 deletions.
D. Well established phenotypes associated with 15q13.3 deletions and 1q21.1 deletions now allow for specific anticipatory care recommendations.

QUESTION 2. Regarding the clinical relevance of major CNVs, genomic investigations are not warranted for all patients with schizophrenia, but clinicians should have a raised index of suspicion for genomic disorders or de novo CNVs in patients who have which of the following?

A. significant learning difficulties
B. dysmorphic facial features
C. unprovoked seizures.
D. all of the above

QUESTION 3. Which of the following statements regarding 22q11.2 deletions is correct?

A. Detection of 22q11.2 deletions significantly changes genetic counseling and anticipatory care from that for other patients with schizophrenia.
B. There remains insufficient evidence to suggest a causal link between 22q11.2 deletions and schizophrenia.
C. 22q11.2 deletions are rare in patients with schizophrenia, and account for approximately 0.1% of all cases.
D. Most patients with schizophrenia have a large, disease-associated CNV such as a 22q11.2 deletion, but most of these CNVs are not large enough to be visible on karyotype.

EVALUATION QUESTIONS

This evaluation form is adapted from the MedBiquitous Journal-Based Continuing Education Guidelines 28 November 2005. This evaluation will appear online at the end of each CME course. Participants **must** *complete this evaluation in order to receive credit. Select the response which best indicates your reaction to the following statements about this activity.*

STATEMENT 1. The activity achieved its stated objectives.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

STATEMENT 2. The activity was relevant to my practice.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

STATEMENT 3. I plan to change my current practice based on what I learned in the activity.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

STATEMENT 4. The activity validated my current practice.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

STATEMENT 5. The activity provided sufficient scientific evidence to support the content presented.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

STATEMENT 6. The activity was free of commercial bias toward a particular product or company.

1. Strongly agree
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EXAMINATION QUESTIONS

Select the single best answer for each question below.

Dysregulation of Regional Endogenous Opioid Function in Borderline Personality Disorder

Alan R. Prossin et al.

Am J Psychiatry 2010; 167:925-933

QUESTION 1. The relationship of major depressive disorder and borderline personality disorder may be best described as which of the following?

A. They are mostly the same disorder but present with different clinical phenotypes.
B. They share some but not all clinical and biological characteristics.
C. Both always have a negative emotional bias with difficulty shifting emotional states.
D. Both lack effective responses to emotionally salient stimuli.

QUESTION 2. In general, neuroimaging studies suggest that patients with borderline personality disorder exhibit which of the following?

A. larger volumes in the hippocampus and amydala than comparison subjects
B. increased metabolic activity in the prefrontal cortex than comparison subjects
C. reduced prefrontal control over limbic structures believed to control and assess emotional salience
D. no distinct neuroimaging differences

QUESTION 3. Relative to healthy subjects, patients with borderline personality disorder appear to have which of the following?

A. similar responses to a negative emotional challenge
B. differences in regional μ-opioid receptor availability both at baseline as well as in response to a negative emotional challenge
C. decreased activation of the endogenous opioid system in brain limbic circuitry as well as in brain regions that control these circuits
D. a strongly nonresponsive μ-opioid system in all areas examined in this study

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Efficacy of Meta-Cognitive Therapy for Adult ADHD

Mary V. Solanto et al.
Am J Psychiatry 2010; 167:958-968

QUESTION 1. Cognitive behavioral therapy as administered to the treated group in this study included all of the following interventions except:

A. Response prevention
B. Challenging depressogenic self-statements
C. Contingent self-reward
D. Enhancing motivation for distant rewards

QUESTION 2. Relative to the meta-cognitive therapy group, patients randomly assigned to the supportive therapy group

A. improved not at all
B. improved equivalently
C. improved less
D. improved more

QUESTION 3. Predictors of improvement in the meta-cognitive therapy group in this study included

A. medication status
B. comorbidity
C. completion of home exercise
D. educational level

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