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Information to 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: Depressive Symptoms, Health Behaviors, and Subsequent Inflammation in Patients With Coronary Heart Disease: Prospective Findings From the Heart and Soul Study
Faculty: Hester E. Duivis, M.Sc., Peter de Jonge, Ph.D., Brenda W. Penninx, Ph.D., Bee Ya Na, M.P.H., Beth E. Cohen, M.D., M.A.S., Mary A. Whooley, M.D.
Affiliations: Center of Research on Psychology in Somatic Diseases, Tilburg University, Tilburg, The Netherlands (H.E.D., P.D.J.); Department of Psychiatry/EMGO Institute, University Medical Center, Vrije Universiteit, Amsterdam (B.W.P.); the Section of General Internal Medicine, VA Medical Center, San Francisco; and the Department of Medicine, University of California, San Francisco (B.Y.N., B.E.C., M.A.W.)
Disclosures: The authors report no financial relationships with commercial interests.
Discussion of unapproved or investigational use of products*: No

Title: Common Abnormalities and Disorder-Specific Compensation During Implicit Regulation of Emotional Processing in Generalized Anxiety and Major Depressive Disorders
Faculty: Amit Etkin, M.D., Ph.D., Alan F. Schatzberg, M.D.
Affiliations: Department of Psychiatry and Behavioral Sciences, Stanford University
Disclosures: Dr. Etkin has served as a consultant for Neostim. Dr. Schatzberg has served as a consultant or speaker for BrainCells, CeNeRx, CNS Response, Corcept, Eli Lilly, Forest Labs, GlaxoSmithKline, Jazz, Lundbeck, Merck, Neuronetics, Novadel, Novartis, Pathway Diagnostics, Pfizer, PharmaNeuroBoost, Quintiles, Roche, Sanofi-Aventis, Sunovian, Synosia, Takeda, Wyeth, and Xytis and has equity in Amnestix, BrainCells, CeNeRx, Corcept (cofounder), Forest Labs, Merck, Neurocrine, Novadel, Pfizer, PharmaNeuroBoost, Somaxon, Synosia; he is named as an inventor on pharmacogenetic use patents on prediction of antidepressant response and glucocorticoid antagonists in psychiatry.
Discussion of unapproved or investigational use of products*: No

Title: Exaggerated Activation of Dorsal Anterior Cingulate Cortex During Cognitive Interference: A Monozygotic Twin Study of Posttraumatic Stress Disorder
Faculty: Lisa M. Shin, Ph.D., George Bush, M.D., Mohammed R. Milad, Ph.D., Natasha B. Lasko, Ph.D., Kathryn Handwerger Brohawn, Ph.D., Katherine C. Hughes, B.A., Michael L. Macklin, B.A., Andrea L. Gold, M.S., Rachel D. Karpf, B.A., Scott P. Orr, Ph.D., Scott L. Rauch, M.D., Roger K. Pitman, M.D.
Affiliations: Department of Psychiatry, Massachusetts General Hospital and Harvard Medical School, Boston L.M.S., G.B., M.R.M., N.B.L., K.H.B., K.C.H., R.D.K., S.P.O., R.K.P.); VA Research Service, Manchester, N.H. (M.L.M.); Department of Psychology, Yale University, New Haven, Conn. (A.L.G.); Department of Psychiatry, McLean Hospital, Belmont, Mass. (S.L.R.)
Disclosures: Dr. Bush has received research support from the Benson-Henry Institute for Mind-Body Medicine, the Center for Functional Neuroimaging Technologies (P41RR14075), the Centers for Disease Control and Prevention, the David Judah Fund, Eli Lilly, the Johnson & Johnson Center for the Study of Psychopathology, the McIngvale Fund, McNeil, the Mental Illness and Neuroscience Discovery (MIND) Institute, NARSAD, the National Science Foundation, NIMH, and Pfizer; he has also served as a consultant or speaker for Eli Lilly, Janssen, Johnson & Johnson, McNeil, Novartis, and Shire and received an honorarium for serving as a judge for an Intel Corporation science competition. All other authors report no financial relationships with commercial interests.
Discussion of unapproved or investigational use of products*: No

* APA 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 September 1, 2011 – End date August 31, 2013

EXAMINATION QUESTIONS

Select the single best answer for each question below.

Depressive Symptoms, Health Behaviors and Subsequent Inflammation in Patients With Coronary Heart Disease: Prospective Findings From the Heart and Soul Study

Hester E. Duivis et al.

Am J Psychiatry 2011; 168:913–920

Learning Objective. The participant will understand the prospective association between depressive symptoms and inflammation and the influence of health behaviors on this association.

Subject Node. Mood Disorders

1. What did the investigators find about the bidirectional relationship between depression and inflammation?

A. Depressive symptoms are associated with higher levels of subsequent inflammation and inflammation is associated with subsequent depressive symptoms.
B. Depressive symptoms are associated with higher levels of subsequent inflammation only.
C. Inflammation is associated with subsequent depressive symptoms only.
D. Depressive symptoms and inflammation are not associated.

2. What health behaviors appeared to explain the association between depressive symptoms and inflammation?

A. Smoking
B. Physical inactivity
C. Body mass index
D. All of the above

3. In this study, the results showed that depressive symptoms predicted high levels of which of the following marker(s)?

A. Interleukin-6 (IL-6)
B. Fibrinogen
C. High-sensitivity C-reactive protein (hsCRP)
D. Both IL-6 and hsCRP

EVALUATION QUESTIONS

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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
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STATEMENT 3. I plan to change my current practice based on what I learned in the activity.
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Common Abnormalities and Disorder-Specific Compensation During Implicit Regulation of Emotional Processing in Generalized Anxiety Versus Major Depressive Disorders

Amit Etkin and Alan F. Schatzberg • Am J Psychiatry 2011; 168:968–978

Learning Objective. Participants will recognize specific brain regions involved in emotional processing that are relevant to mood and anxiety disorders.

Subject Node. Mood Disorders

1. This study sought to measure the ability to implicitly regulate emotional conflict. Which diagnosis was associated with deficits in this ability?

A. No patient group exhibited deficits in regulating emotional conflict.
B. Only the generalized anxiety disorder without comorbid depression patients had deficits.
C. Generalized anxiety disorder patients with or without major depression displayed deficits.
D. Only major depression without comorbid anxiety was associated with deficiencies.

2. Activity in the ventral anterior cingulate during emotional conflict adaptation has which of the following relationships with clinical status?

A. Activity is reduced with greater symptoms of anxiety or depression.
B. Activity is lower in patients with generalized anxiety or major depressive disorders than in healthy comparison subjects
C. Activity did not differ between any of the diagnoses and healthy comparison subjects.
D. Activity was lower in the healthy comparison subject than the depression patients only.

3. Results in the major depressive disorder-only group consisted of which of the following?

A. Impaired conflict adaptation and normal activity in the ventral cingulate
B. Normal conflict adaptation and restored negative ventral cingulate-amygdala coupling
C. Impaired conflict adaptation and engagement of anterior lateral prefrontal cortices
D. Normal conflict adaptation and engagement of anterior lateral prefrontal cortices

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Exaggerated Activation of Dorsal Anterior Cingulate Cortex During Cognitive Interference: A Monozygotic Twin Study of Posttraumatic Stress Disorder

Lisa M. Shin et al. • Am J Psychiatry 2011; 168:979–985

Learning Objective. Participants will identify brain activation patterns that occur in the context of PTSD as well as patterns associated with a possible familial propensity to PTSD.

Subject Node. Posttraumatic Stress Disorder

1. How did dorsal anterior cingulate cortex activation differ in the combat-exposed veterans with PTSD compared with other groups?

A. Significantly lower than seen in all other groups
B. No difference from their co-twins, but significantly greater than seen in the veterans without PTSD and their co-twins
C. Significantly greater than seen in their identical co-twins
D. Significantly lower than seen in combat-exposed veterans without PTSD

2. In this study of monozygotic twins discordant for trauma exposure, if a functional brain abnormality is observed in the combat-exposed veterans with PTSD and also in their identical co-twins without PTSD, then this abnormality is likely to be due to:

A. Exposure to trauma
B. An acquired characteristic of PTSD
C. A familial vulnerability factor
D. The presence of a specific gene

3. How was dorsal anterior cingulate cortex activation in the combat-unexposed twins related to their combat-exposed co-twins' clinical measures?

A. Positively correlated with PTSD symptom severity
B. Negatively correlated with PTSD symptom severity
C. Positively correlated with depression severity
D. Negatively correlated with combat exposure severity

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