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EXPERT REVIEW SUPPLEMENT

THE SLEEP CYCLE: A *FOUR STAGE* *EDUCATIONAL INITIATIVE IN INSOMNIA*

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ABSTRACT

Most adults have difficulty sleeping at some point in their lives. These issues may manifest as problems falling asleep, staying asleep, or having nonrestorative sleep. When sleep issues begin to cause daytime dysfunction on a regular basis, they reach the status of an insomnia disorder. Individuals with insomnia have difficulties with concentration, fatigue, and mood. Insomnia is also associated with an elevated risk of major depressive disorder, panic disorder, substance abuse disorders, hypertension, and diabetes. Almost 50% of all cases of chronic insomnia are due to a mental disorder, with depressive illness being the most common. Other common causes of comorbid insomnia include chronic respiratory disease, chronic pain, degenerative neurological disease, and some medications. Evaluation of an individual with insomnia is comprehensive, and requires psychiatric, sleep, and medical evaluations including sleep-related behaviors and thoughts, functional impairment, and underlying causes and comorbidities. There are a several therapies available for the treatment of primary insomnia, most notably cognitive-behavioral therapy and pharmacologic therapies. Generally, the greater the functional impairment a person experiences, the more there is to be gained from treatment. The decision about whether to treat insomnia and which treatments should be used, should take into account the risks and expected benefits of all treatment options. In management of insomnia related to mental or medical disorders, generally the principal disorder must be fully treated as part of the insomnia treatment plan.

In this Expert Review Supplement, John W. Winkelman, MD, PhD, provides an introduction to sleep and describes the evaluation and workup of an individual with primary insomnia, including the use of a polysomnogram. Next, Andrew D. Krystal, MD, presents a case surrounding the decision of when to treat an individual for insomnia and determining which treatments are most effective. Finally, W. Vaughn McCall, MD, MS, presents a case on comorbid insomnia with an emphasis on the need to treat both insomnia and major depression.

THE SLEEP CYCLE: A FOUR-STAGE EDUCATIONAL INITIATIVE IN INSOMNIA

Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and policies 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 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

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Statement of Need and Purpose

Sleep/wake disorders constitute a widespread yet under-recognized public health problem. Most sleep disorders involve difficulty initiating or maintaining sleep and daytime sleepiness. Approximately 50% of American adults report frequent episodes of insomnia. Despite its prevalence and impact on quality of life, only 6% of individuals with insomnia are diagnosed with the disorder. A low rate of recognition of sleep disorders exists among clinicians, emphasizing the need for increased education and training about sleep disorders. The availability of multiple sleep assessment tools requires physicians to acquire skill in determining which will prove most helpful for assessing their patients given the presenting symptoms or complaints. Management of patients with insomnia and comorbid disorders poses a considerable challenge for healthcare providers. Many medications list insomnia or daytime somnolence as side effects, and a clinician must be able to distinguish between an organic sleep problem and the side effects of medication used to treat another condition. Conversely, some medications commonly prescribed for psychiatric disorders have been shown to enhance sleep. Questions also remain about the safety of long-term use of certain hypnotic agents and the issue of dependence. Rational prescribing recommendations and nonpharmacologic approaches should be elucidated for clinicians. To better serve their patients, physicians need to be aware of emerging options in pharmacotherapy for insomnia. Up-to-date information on evidence from clinical trials and new treatment approaches would equip physicians to make optimal treatment choices as agents become available and to educate patients on prospective treatments. Evidence also supports the use of nonpharmacologic treatments such as cognitive-behavioral therapy for some patients with chronic insomnia. Clinicians would benefit from guidance regarding therapeutic interventions for insomnia in complicated patients, including those with psychiatric comorbidities.

Target Audience

This activity is designed to meet the educational needs of primary care physicians and psychiatrists. Other health professionals who care for individuals with sleep conditions may also benefit from this activity.

Learning Objectives

At the completion of this activity, participants should be better able to:

- Assess patients for sleep dysfunctions using available tools and guidelines
- Appropriately refer patients to sleep laboratories for further evaluation and follow-up
- Identify insomnia as a distinct disorder in the presence of comorbid or contributing conditions
- Employ evidence-based pharmacologic and nonpharmacologic treatments for patients with insomnia and comorbid conditions
- Interpret clinical data regarding new and emerging treatment strategies for insomnia

Faculty Affiliations and Disclosures

Andrew D. Krystal, MD, is professor of psychiatry in the Department of Psychiatry and Behavioral Sciences at Duke University Medical Center in Durham, North Carolina. Disclosures: Dr. Krystal is a consultant to Abbott, Actelion, Arena, Astellas, AstraZeneca, Axiom, Bristol-Myers Squibb, Cephalon, CHDI, Eli Lilly, GlaxoSmithKline, Jazz, Johnson and Johnson, King, Kingsdown Inc, Merck, Neurocrine, Neurogen, Neuronetics, Novartis, Organon, Ortho-McNeil Janssen, Pfizer, Research Triangle Institute, Respiroics, Roche, sanofi-aventis, Sepracor, Somaxon, Takeda, and Transcept; and receives grant/research support from Astellas, Cephalon, Evotec, GlaxoSmithKline, Merck, the National Institutes of Health, Neurocrine, Neurogen, Neuronetics, Pfizer, Respiroics, sanofi-aventis, Sepracor, Somaxon, Takeda, and Transcept.

John W. Winkelman, MD, PhD, is associate professor of psychiatry at Harvard Medical School and medical director of the Sleep Health Center of Brigham and Women's Hospital in Boston, Massachusetts. Disclosures: Dr. Winkelman is a consultant to and receives honoraria from sanofi-aventis and Sepracor.

W. Vaughn McCall, MD, MS, is professor and chair in the Department of Psychiatry and Behavioral Medicine at Wake Forest University School of Medicine in Winston-Salem, North Carolina. Disclosures: Dr. McCall receives research support and honoraria from sanofi-aventis and Sepracor.

CME Course Director **James C.-Y. Chou, MD**, is associate professor of psychiatry at Mount Sinai School of Medicine in New York City. Dr. Chou has received honoraria from AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Janssen, and Pfizer.

Activity Review Information

The activity content has been peer-reviewed by James C.-Y. Chou, MD. Review Date: November 19, 2009

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To Receive Credit for this Activity

Read this Expert Review 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 December 1, 2011 to be eligible for credit.

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The Sleep Cycle Stages

This Expert Review Supplement is the first stage of the Sleep Cycle Initiative. In January, look for a link to the Sleep Cycle Web site at www.cnsspectrums.com to find new CME-certified case study presentations, an Ask the Experts forum where you can submit your questions to the faculty, and a list of helpful resources.

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