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EXPERT REVIEW SUPPLEMENT

Case in Point: Evidence-Based Insights For Epilepsy Management

PHARMACOLOGIC TREATMENT OF EPILEPSY

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ABSTRACT

Epilepsy affects >2 million people in the United States, making it one of the most common neurobiological conditions. Typically, epilepsy is treated with one of several available antiepileptic drugs (AEDs) and patients are able to experience freedom from seizures with minimal side effects. However, there are some patients who do not respond to treatment and require the use of multiple drug combinations or surgical intervention. Although there are few studies supporting its use, multidrug regimens have been known to be helpful for patients; however, clinicians should monitor patients for adverse side effects. Vagus nerve stimulation is the only US Food and Drug Administration–approved surgical neurostimulation therapy for epilepsy, and patients' conditions often progress for many years before epilepsy surgery options are considered. Lastly, due to the chronic nature of epilepsy, clinicians should be aware of the presence of comorbid psychiatric conditions as well.

This supplement is Part Three in the "Case in Point: Evidence-Based Insights for Epilepsy Management" series. In this Expert Review Supplement, Andrew J. Cole, MD, FRCPC, outlines a case of a patient who experiences a convulsive seizure due to a meningioma, and Nathan B. Fountain, MD, outlines the best practices for the case patient, including a discussion on AEDs phenytoin and lamotrigine, as well as alternative AEDs.



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



CASE IN POINT: EVIDENCE-BASED INSIGHTS FOR EPILEPSY MANAGEMENT

Accreditation Statement

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Statement of Need and Purpose

Epilepsy is one of the most common neurological disorders, affecting between 2.1 and 2.7 million people in the United States. Yet many adults with epilepsy do not receive sufficient treatment. These patients also reported experiencing significantly worse health-related quality of life, were more likely to experience limitations in socializing and other normal activities, and had a higher incidence of other health risks such as smoking and obesity. Neurologists who treat patients with epilepsy must be equipped with the latest information on pharmacological agents and with appropriate communication and educational strategies to establish an alliance with the patient to improve long-term patient outcomes. Approximately 65% of patients respond to treatment with a single antiepileptic drug (AED). The goal of pharmacotherapy with AEDs is to control seizures while minimizing adverse events. Nonadherence represents a major problem in the management of chronic illnesses, including epilepsy. Good physician-patient communication is essential to promoting treatment adherence. Physicians would benefit from specific direction regarding fostering effective communication regarding adherence and epilepsy management.

Learning Objectives

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

- Interpret the clinical evidence regarding the safety, efficacy, and tolerability of available and emerging antiepileptic drugs (AEDs)
- Assess the risks and benefits of AED therapy for individual patients based on drug profile and patient characteristics such as seizure type and health status

- Implement communication strategies to assess and promote adherence to AED treatment throughout the course of therapy

Target Audience

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

Faculty Affiliations and Disclosures

Andrew J. Cole, MD, FRCPC, is director of the Massachusetts General Hospital Epilepsy Service and associate professor of neurology at Harvard Medical School, both in Boston. Dr. Cole is a consultant to and has received honoraria from GlaxoSmithKline and UCB Pharma.

Nathan B. Fountain, MD, is professor of neurology, and director of the FE Dreifuss Comprehensive Epilepsy Program at the University of Virginia in Charlottesville. Dr. Fountain is a consultant to UCB Pharma and has received research support from the Epilepsy Research Foundation, the National Institutes of Health, the Robert Wood Johnson Foundation, and UCB Pharma.

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

Isabelle M. Germano, MD, is professor of neurology, neurosurgery, and oncological sciences at Mount Sinai School of Medicine in New York City. Dr. Germano reports no affiliation with or financial interest in any organization that may pose a conflict of interest.

Activity Review Information

The activity content has been peer reviewed and approved by Isabelle M. Germano, MD.

Review Date: January 27, 2010.

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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 6 and 7. To obtain credit, you should score 70% or better. Early submission of this posttest is encouraged. Please submit this posttest by March 1, 2012 to be eligible for credit.

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