

EXPERT ROUNDTABLE SUPPLEMENT

CREATIVITY AND DEMENTIA: EMERGING DIAGNOSTIC AND TREATMENT METHODS FOR ALZHEIMER'S DISEASE

AUTHORS

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CME²

ABSTRACT

Alzheimer's disease research is beginning to yield promising treatments and prevention strategies. Current Alzheimer's disease treatments benefit symptoms, but do not appreciably alter the basic disease process. The new generation of Alzheimer's disease medications, however, will likely include disease-modifying treatments, which will slow disease progression or stop it entirely. These new treatments pursue four points of intervention: increasing the clearance of amyloid- β_{42} ($A\beta_{42}$) proteins in the brain, blocking $A\beta_{42}$ production, decreasing $A\beta_{42}$ production, and decreasing $A\beta_{42}$ aggregation. Neurogenerative therapies are being explored as well, suggesting future treatments may not only stop disease progression but also reverse it. Risk factors for developing Alzheimer's disease and factors associated with a lower risk of Alzheimer's disease have been identified. Future Alzheimer's disease management may come to resemble routine cardiovascular disease prevention and management, which involves the control of modifiable risk factors and the use of medications that decrease or stop underlying pathology. The hope is that such management will arrest the disease process before cognitive symptoms have begun. Like other neurologic illnesses, Alzheimer's disease has a profound impact on creativity. Alzheimer's disease attacks the right posterior part of the brain, which enables people to retrieve internal imagery and copy images. Alzheimer's disease patients may lose the ability to copy images entirely. However, people with Alzheimer's disease can continue to produce art by using their remaining strengths, such as color or composition instead of shapes or realism. Studying art and dementia is a model for identifying the strengths of psychiatric patients. Remarkably, art emerges in some patients even in the face of degenerative disease. In this expert roundtable supplement, Jeffrey L. Cummings, MD, offers an overview of recent advances in Alzheimer's disease research. Bruce L. Miller, MD, discusses creativity in patients with neurologic illnesses. Daniel D. Christensen, MD, discusses emerging Alzheimer's disease therapies. Debra Cherry, PhD, discusses the advocacy needs of Alzheimer's disease patients and their caregivers. In addition, a testimonial of the impact of Alzheimer's disease on an accomplished artist is featured.

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Needs Assessment

UCLA has surveyed conference participants and professionals in the community through an annual needs assessment and has found an educational need for a more holistic discussion on Alzheimer's disease. This need encompasses information on the selection of treatments for this disorder, demonstration of the human spirit and creativity of those living with Alzheimer's disease, as well as the role of the community in helping to provide a better future for all those who suffer from this illness. This supplement will specifically address all of these unmet needs and will provide a personal perspective on the illness. There are unmet needs in recognition of dementia, diagnosis of Alzheimer's disease and mild cognitive impairment (MCI), use of clinical and technological diagnostic methodologies, and Alzheimer's disease treatment. These deficiencies in clinical practice adversely impact patient care and patient and caregiver quality of life. Major advances have occurred in the recognition of dementia, diagnosis of MCI and Alzheimer's disease, and treatment of Alzheimer's disease. Despite this progress, many patients go unrecognized until late in their disease, and available treatments are underutilized. Research advances require translation into clinical practice where they can maximally impact the care of patients.

Target Audience

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

Learning Objectives

- Update practitioners in psychiatry, neurology, and primary care on the state of the art in understanding and treating Alzheimer's disease.
- Promote community awareness regarding the human toll of this debilitating disease.
- Discuss future treatments of Alzheimer's disease.

Faculty Affiliations and Disclosures

Jeffrey L. Cummings, MD, is the Augustus Rose professor of neurology, professor of psychiatry, director of the UCLA Alzheimer's Disease Research Center, and director of the Deane F. Johnson Center for Neurotherapeutics at the University of California, Los Angeles. Dr. Cummings has provided consultation for or received research support from Abbott, Adamas, Avanir, CoMentis, Eisai, Forest, Lundbeck, Medivation, Memory, Myriad, Neurochem, Novartis, Ortho-McNeil Neurologic, Pfizer, Prana, sanofi-aventis, and Takeda.

Bruce L. Miller, MD, is professor of neurology, A.W. & Mary Margaret Clausen distinguished chair, and clinical director of the Memory and Aging Center at the University of California, San Francisco, School of Medicine. Dr. Miller has served on the speaker's bureaus of Novartis and Pfizer.

Daniel D. Christensen, MD, is clinical professor of psychiatry and neurology and adjunct professor of pharmacology at the University of Utah School of Medicine in Salt Lake City. Dr. Christensen has served as a consultant for Bayer, Bristol-Myers Squibb, Designer Genes, Eisai, Eli Lilly, GlaxoSmithKline, Janssen, Myriad Genetics, Novartis, NPS, Pfizer, RiboMed, Solvay, and Wyeth; has served on the advisory boards of Eisai, GlaxoSmithKline, Myriad, and Pfizer; has served on the speaker's bureaus of Abbott, Bayer, Bristol-Myers Squibb, Eisai, Eli Lilly, GlaxoSmithKline, Janssen, Novartis, Pfizer, Solvay, Upjohn, and Wyeth; and has received grant or research support from Abbott, Bristol-Myers Squibb, Designer Genes, Eccles Institute of Human Genetics, GlaxoSmithKline, Janssen, Myriad Genetics, Novartis, NPS, Organon, Pfizer, RiboMed, Solvay, and Wyeth.

Debra Cherry, PhD, is the executive vice president of the California Southland Chapter of the Alzheimer's Association in Los Angeles. Dr. Cherry reports no financial, academic, or other support that may pose a conflict of interest.

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