

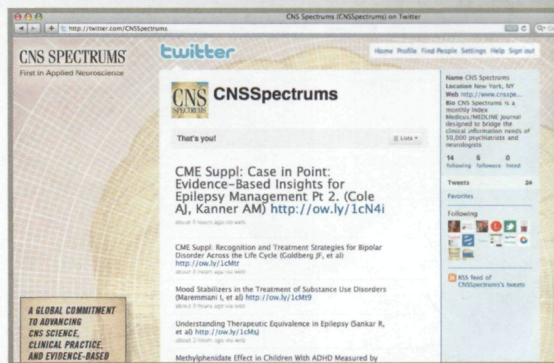
NO PASSWORD. NO FEE. NO HASSLE. JUST PEER-REVIEWED CLINICAL INFORMATION

www.cnsspectrums.com



NOW FOLLOW US ON TWITTER!

**TWITTER.COM/
CNSSPECTRUMS**



*Click on the **PsychCast™** button at www.cnsspectrums.com

CNS-Based Podcast Programming from the Publishers of *Primary Psychiatry*, *CNS Spectrums*, and *Psychiatry Weekly*

CNS Spectrums' Web portal is now better than ever — a one-stop source providing the following integrated services based on input from you... *our readers*:

- **eSubmissions of Manuscripts and ePeer Review via ScholarOne's Manuscript Central**
- **RSS Feeds for Current Issues, CME articles and Academic Supplements**
- **Enhanced Citation-based Article Search**
- **Dynamic Pop-Up Article Images**
- **Downloadable Article PDFs**
- **eLearning via Enduring Materials**
- **Most-Read Articles automatically tabulated**
- **Integrated Customer Service Tools**, including an Online Store featuring all Clinical Handbooks
- **A host of additional services and features**...including hyperlink access to MBL's other CNS sources: www.primarypsychiatry.com and www.psychiatryweekly.com

To learn more, please visit www.cnsspectrums.com or www.mblcommunications.com

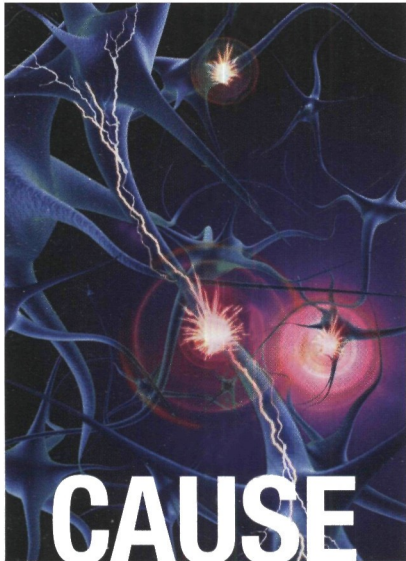
PRIMARY PSYCHIATRY™
The Largest Peer-Reviewed Psychiatric Journal in the Nation

CNS SPECTRUMS™
First in Applied Neuroscience

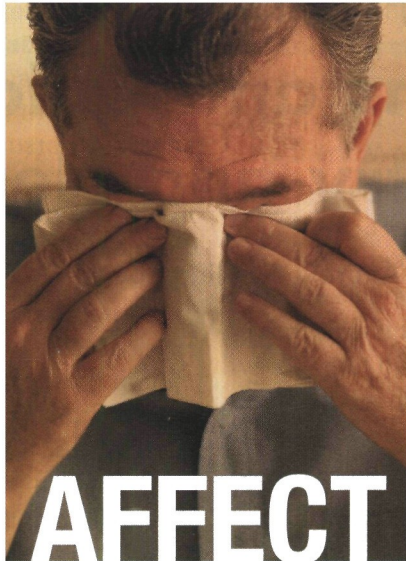
Psychiatry Weekly™
The Leading News Service from Primary Psychiatry™ and Physician's Weekly™

ADS™
ALZHEIMER'S DISEASE SUMMIT
™ Honoring Robert K. Adams, MD's Global Practice

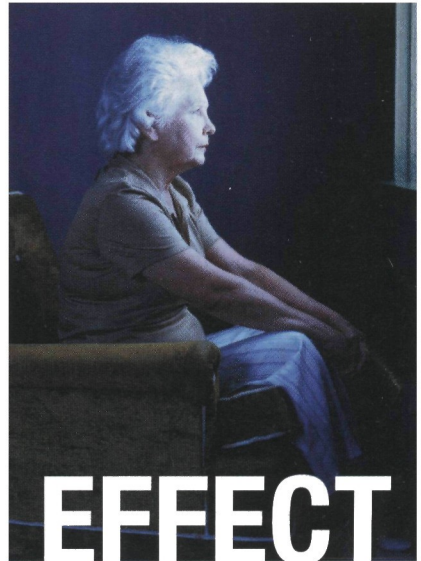
A Global Commitment to Advancing CNS Science, Clinical Practice, and Evidence-Based Medicine



CAUSE



AFFECT



EFFECT

PBA:

- Is associated with neurologic diseases such as MS, ALS, Parkinson's disease, dementias including Alzheimer's disease, and neurologic injuries such as stroke and TBI^{1,2}
- It is hypothesized that these neurologic diseases and injuries impact the excitatory action of glutamate, leading to excessive glutamatergic signaling and increased electrical activity in neurons³⁻⁵

PBA:

- Is a distinct neurologic disorder of affect characterized by involuntary episodes of motor expression of emotion, such as laughing, crying, or related facial features¹
- PBA is surprisingly prevalent, affecting millions of patients and caregivers in the United States alone^{1,6-12}
- The disorder is also commonly known as emotional lability, pathologic laughing and crying, and emotional incontinence¹

PBA:

- Can significantly impact patients and caregivers.⁶ The symptoms of PBA can be severe, with persistent and unremitting episodes.¹³ Involuntary crying or laughing may lead to embarrassment, anxiety, and depression, and result in social isolation^{6,13-16}
- Addressing PBA can help improve the lives of patients and their families and caregivers,⁶ thereby reducing its physical, emotional, and social impact

Pseudobulbar Affect | PBA

For more information, please visit www.PBAinfo.org

References: 1. Arciniegas DB, Topkoff J. The neuropsychiatry of pathologic affect: an approach to evaluation and treatment. *Semin Clin Neuropsychiatry*. 2000;5:290-306. 2. Kaschka WP, Meyer A, Schier KR, et al. Treatment of pathological crying with citalopram. *Pharmacopsychiatry*. 2001;34:254-258. 3. Greenamyre JT. The role of glutamate in neurotransmission and in neurologic disease. *Arch Neurol*. 1986;43:1058-1063. 4. Bittigau P, Ikonomidou C. Glutamate in neurologic diseases. *J Child Neurol*. 1997;12:471-485. 5. Mattson MP. Excitotoxic and excitoprotective mechanisms: abundant targets for the prevention and treatment of neurodegenerative disorders. *Neuromolecular Med*. 2003;3:65-94. 6. Moore SR, Gresham LS, Bromberg MB, et al. A self report measure of affective lability. *J Neurol Neurosurg Psychiatry*. 1997;63:89-93. 7. Carosio JT, Mulvihill MN, Sterling R, et al. Amyotrophic lateral sclerosis: its natural history. *Neurol Clin*. 1987;5:1-8. 8. Gubbay SS, Kahana E, Zilber N, et al. Amyotrophic lateral sclerosis: a study of its presentation and prognosis. *J Neurol*. 1985;232:295-300. 9. Zeilig G, Drubach DA, Katz-Zeilig M, et al. Pathological laughter and crying in patients with closed traumatic brain injury. *Brain Inj*. 1996;10:591-597. 10. Tang WK, Chan SSM, Chiu HFK, et al. Emotional incontinence in Chinese stroke patients: diagnosis, frequency, and clinical and radiological correlates. *J Neurol*. 2004;251:865-869. 11. Minden SL, Schiffer RB. Affective disorders in multiple sclerosis. *Arch Neurol*. 1990;47:99-104. 12. Kim JS, Choi S, Kwon SU, et al. Inability to control anger or aggression after stroke. *Neurology*. 2002;58:1106-1108. 13. Dark FL, McGrath JJ, Ron MA. Pathological laughing and crying. *Aust N Z J Psychiatry*. 1996;30:472-479. 14. Shalhani AT, Sabbagh MN, Doody R. Laughter and crying in neurologic disorders. *Neuropsychiatry Neuropsychol Behav Neurol*. 1994;7:243-250. 15. Black DW. Pathological laughter. A review of the literature. *J Nerv Ment Dis*. 1982;170:67-71. 16. Green RL. Regulation of affect. *Semin Clin Neuropsychiatry*. 1998;3:195-200.