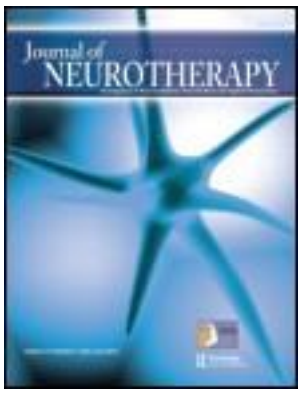

Journal of Neurotherapy: Investigations in Neuromodulation, Neurofeedback and Applied Neuroscience

Preface

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Preface

OUR SECOND SPECIAL ISSUE

This special issue of the *Journal of Neurotherapy* introduces the technique of operant conditioning of brain blood flow by feedback of information about oxygenation and temperature of the brain obtained by non-invasive instrumentation. The ingenious use of oximeter and infrared camera devices make possible estimations of brain blood flow in a manner to allow subjects to use this information to regulate their own physiologic processes. Hemoencephalography–literally a blood brain picture–is advanced in this special issue as another specialized technique in the realm of neurotherapy that has the potential for improving human function and relieving human disease. This issue represents the first attempt anywhere to publish systematic information about Hemoencephalography. The information presented here is mainly descriptive and relies on a case series method of reporting, but lays the groundwork for more structured and controlled studies as called for by each of the authors. Like EEG biofeedback, brain blood flow biofeedback can be studied as a stand-alone method or as a combination therapy along with medication, audiovisual stimulation, electro-magnetic stimulation and other "neurotherapies." It seems to have potential applications in disorders characterized by brain perfusion and activation abnormalities, as pointed out by Tim Tinius in his Introduction. Applications may include migraine headache, post traumatic brain states, ADHD, learning disabilities and affective disorders. Functional improvement as well as evidence of improved brain perfusion and physiologic normalization are important outcome markers to establish the clinical efficacy of hemoencephalographic therapies.

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Congratulations to Editor, Tim Tinius, PhD and Managing Editor, Darlene Nelson, MA, for a job well done in seeing this special issue through to completion. Their many hours of work spent in coordinating peer review and performing all of the editorial tasks that are necessary to make a paper publishable are appreciated, and they deserve our thanks for making it possible to introduce this exciting new therapeutic possibility to a broad readership.

As a special issue of the *Journal of Neurotherapy,* this issue will also be published and distributed as a monograph. Thus, it has the potential of introducing brain blood flow biofeedback to a broad audience of individuals interested in headache, performance enhancement, rehabilitation, special education, and other areas where techniques for modifying, restoring or initiating brain function and blood flow are applicable. It is hoped that these individuals who are not necessarily conversant with brain physiology biofeedback will find this monograph as interesting reading as surely will the regular subscribers to the *Journal of Neurotherapy*.

This special issue is our second. The first appeared as Volume 7(3/4) of the *Journal of Neurotherapy* on quantitative EEG databases in 2003, edited by Joel F. Lubar, PhD. Future special editions are planned on the use of neurotherapy and quantitative EEG in criminal justice settings, edited by James Evans, PhD and the use of neurotherapy and quantitative EEG in educational settings, edited by Roger deBeus, PhD.

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Editor