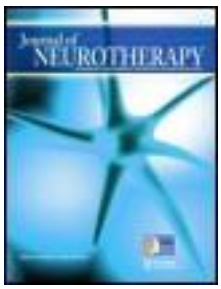

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Changes in the Journal of Neurotherapy

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Editorials

Changes in the Journal of Neurotherapy

David Trudeau, MD

With this issue, The Society for the Study of Neuronal Regulation (SSNR) becomes the publisher of the Journal of Neurotherapy. At the 1998 annual meeting, SSNR agreed to assume the publication of the Journal of Neurotherapy from the Neurotherapy Foundation. The Journal was founded and fostered through its first two volumes and first three years of publication by the Neurotherapy Foundation, under the leadership of Fred Johnson. It is no mean task to start a new journal, and I am told that the attrition rate for new journals is high during the first two years of life. Nevertheless, this journal received special care and handling by a few very dedicated individuals, and it has survived. For that, all of us involved in neurotherapy owe the Neurotherapy Foundation and Fred Johnson a special debt of gratitude.

In 1998 the Journal became the official journal for the Society for the Study of Neuronal Regulation, which is the only professional organization devoted exclusively to brain wave biofeedback. It is only natural that as the Society and the Journal mature, that they become part of the same organization. Beginning with this issue the board of directors of SSNR will be the board of directors of the journal, and responsible for its publication. Both organizations – the journal and the SSNR – will benefit from a common infrastructure and fiscal management.

The board of directors of SSNR and Fred Johnson of the Neurotherapy Foundation asked me to become the editor of the Journal, and I have agreed to do that. Darlene Nelson will continue to serve as executive secretary. We both pledge our efforts to build on the excellent foundation provided by the dedicated work of the Neurotherapy Foundation. I look for your feedback and suggestions about our changes. I have a vision for the Journal that includes several goals:

- Four issues a year
- Improved layout and proofing within the bounds of our current publishing format
- Growth of subscriptions to a level where we can provide a high quality paper and binding
- A web link for the Journal from the SSNR home page at www.ssnr.com. (now active)
- Instruction for authors (now appearing on the last page of the Journal)
- A Journal Mission Statement (now appearing on the masthead)
- An archive of all back issues of the Journal on the web
- Encouraging more clinicians to publish case reports and case series from their practice experience, enlisting mentorship from associate and contributing editors for these new authors
- Continued dedication to the highest standards of scholarship in refereed articles
- Expanding the contents of the Journal to include book reviews, reviews of other journals, guest editorials, brief clinical reports, and letters to the editor

David L. Trudeau, M.D.

Frontal Theta and Attention Deficit Hyperactivity Disorder – a quandary and a possible solution.

The frontal theta beta ratio in childhood ADHD is discussed in two papers in this issue of the Journal of Neurotherapy. In the first, Fenger presents a detailed study of a series of 38 children with ADD or LD who decreased theta-beta ratios and improved in academic achievement. In the second Wadhwani and colleagues present a case study of a ten year old with improvement of ADHD findings with neurotherapy treatment while on medication, but not with stimulants medication alone prior to and subsequent to neurotherapy treatment. These two papers are seemingly contradicted by a third paper in this issue by

Ramos which anecdotally describes substantial improvement of ADHD in three cases using frontal theta and beta reward along with central alpha reward. Ramos achieves results using an altogether different protocol, one that violates the supposed dictum that suppression of excess theta is essential to ADHD remediation with neurofeedback. What could possibly reconcile these seemingly contradictory positions and explain why theta suppression is not always helpful? One possibility is that the subjects described in these three studies vary in their neurometric findings. Although we are offered data from single leads regarding relative values or ratios, these are not quantitated against normative data.

Perhaps a clue to the dilemma of varying response to different therapies can be found in the 1998 SSNR meeting abstract by Chabot and his colleagues that appears in this issue, in which subtypes of QEEG are described in ADHD children. These QEEG subtypes are further analyzed by LORETA in an attempt to localize generators of abnormal resting EEG relative amplitudes. Simply put, the extensive work by Chabot and his colleagues supports that there are QEEG subtypes of ADHD in children, and these subtypes vary in their response to medication therapy. The least responsive to either methylphenidate or methamphetamine is that associated with frontal theta excess. Is it possible that given the medication nonresponse of high frontal theta subtypes, that subjects with high frontal theta would gravitate more often to the neurotherapist's office? Thus, even though 30% of Chabot's subjects (all drawn from a pediatric neurology clinical sample) showed high frontal theta, subjects who come to the neurotherapist could conceivably be more often those who do not respond to conventional medication treatment, and more likely to have high frontal theta. These, in turn may be responsive to neurotherapy that generally rewards 12-20 Hz and suppresses 2-8 Hz frontally. Other subtypes, such as high alpha and high beta may respond differentially to other types of neurofeedback.

Of course this is conjectural, and I know of no data to support this conjecture. And this brings up the point I wish to make; what is needed is a study of a fairly sizable sample of ADHD subjects who have had pre and post neurotherapy QEEG's. At least two questions need to be asked: 1) Are the QEEG's of this sample different from or similar to the sample from the neurology clinic population and 2) what QEEG features in this sample predict response, if any, to what types of neurotherapy.

Those of us who have treated children and adults for ADHD may have already collected the data in our practices and research labs. What is needed is a collaborative retrospective study to explore the above questions. What I am suggesting is that readers of this journal pool their data regarding ADHD pre and post neurometric and QEEG measurements in some meaningful way. If you have such data in your practice, please send the particulars (number and demographics of cases, types of tests used, equipment used) to me in care of The Journal of Neurotherapy or by email to trude003@maroon.tc.umn.edu. As a preliminary step, I would like to look at this data (along with several others who have volunteered for this project), and report back to the readers of this journal on the feasibility of this study. I would also solicit commentary on this project in the form of letters to the editor, which would be published as part of an ongoing dialogue.

It may be possible that some QEEG types of ADHD are more responsive to particular types of therapy. A preliminary study using existing data would be a place to start to answer the questions raised here.

David L. Trudeau, M.D.