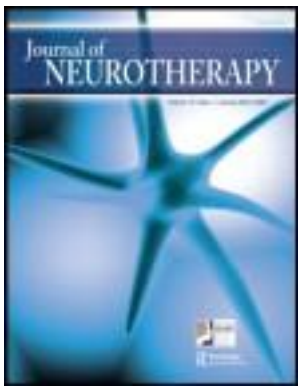

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Editorials

David Trudeau Editor M.D.

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Editorials

David Trudeau, M.D., Editor

Archiving the Journal of Neurotherapy Online

The editorial staff of this journal has had requests for back issues and reprints of the many fine papers that have appeared in past issues. Our ability to provide back issues and reprints has been limited until now. It is our intention to eventually have a professional publishing house handle the publication of the Journal and provide reprint services. Until such time we are making past issues available electronically. The entire contents of Volumes 1 and 2 can now be found at www.snr-jnt.org. If you are missing back issues or wish copies of papers or bibliographies, you may now go directly to the web site and electronically retrieve that information. In some small way, we hope this availability of research papers encourages more research in neurotherapy, and submissions to this and other peer reviewed journals.

There is also more information of interest appearing at this web site - abstracts of SNR meeting papers, copies of recent newsletters and an online membership directory. We hope our readers will freely avail themselves of these informational services, and let others know of our efforts and existence as a journal committed to excellence in the study of neurotherapy.

Listening to Neurofeedback

The February 15, 1999 issue of "The New Yorker" under the banner of "A Critic at Large" bears a commentary by Malcolm Gladwell entitled "Running from Ritalin: Is the hectic pace of contemporary life really to blame for A.D.D.? Not so fast."

In his commentary, Gladwell does a good job of describing the syndrome of Attention Deficit Disorder broadly, and describes the diagnostic criteria and continuous performance testing that are in vogue today to establish the presence of the disorder. Gladwell argues that since the estimate of the number of children on Ritalin (one to two percent) is less than the number of children estimated to have ADHD (four to five percent) therefore Ritalin (methylphenidate) is under-prescribed. His arguments are focused on concerns expressed in several recent popular books ("The Hyperactivity Hoax" by neuropsychiatrist Sidney Walker, "Ritalin Nation" by psychologist Richard DeGrandpre, and "Running on Ritalin" by physician Lawrence Diller) that argue that Ritalin may be overprescribed.

It is interesting that the use of prescribed Ritalin is becoming the battleground for ADHD treatment controversy. (Other effective medications used in ADHD treatment, such as methamphetamine and Cylert are not even mentioned in Gladwell's commentary). In pushing his case for Ritalin acceptance, Gladwell perpetuates the popular myth that Ritalin is not addicting, and is even good for addiction treatment for stimulant abusers. He cites a statement by Nora Volkow, the Chairman of Medicine at Brookhaven National Laboratory, "that between ten and twenty percent of drug addicts have ADHD. 'In studies when they were given Ritalin they would stop taking cocaine,' she told me." However, a recently published report by Volkow and her colleagues (1999) points out that methylphenidate binds to the same dopamine receptors as does cocaine, and that methylphenidate in therapeutic dosage causes the same intense cravings in cocaine addicts that a small amount of cocaine will cause. This is especially true in individuals who have upregulated the number of dopamine receptors presumably as a result of chronic high dose dopamine agonist (cocaine) administration. Clearly methylphenidate and other dopamine agonist medications are effective in treating ADHD in a number of

individuals, although long term outcomes on dopamine receptor upregulation are unknown. Dopamine receptor upregulation may well be an important sequela of chronic and/or high-dose dopamine agonist administration.

Ritalin, very rightly so, remains a schedule II narcotic drug under FDA and DEA regulations. It became a scheduled drug in the early 1970's due to wide spread abuse and diversion, with intravenous abuse common. Its package insert clearly states in bold type in a black bordered box that methylphenidate is not to be used in individuals with a history of stimulant or other drug abuse. (PDR 1999)

As Gladwell rightly points out, decades of research have demonstrated the strong relationships between ADHD and non-alcohol Psychoactive Substance Use Disorder (PSUD). The long term childhood to adult studies of Manuza and colleagues show that one subtype of ADHD - males with childhood ADHD and Conduct Disorder features - is more prone to adult non-alcohol substance abuse. (1998) These individuals, as adult substance abusers, are more likely to prefer stimulants than substance abusers that did not have childhood ADHD. (Rubin et al., 1998) What remains to be demonstrated is that childhood use of stimulant medication in male ADHD/Conduct Disorder can prevent the development of adolescent or adult stimulant abuse. That is to say, we need data regarding childhood male ADHD/Conduct Disorder treatment with stimulants in terms of adult PSUD outcome, before we know that: (1) stimulant medication treatment is not without substance abuse risk in susceptible persons, and (2) childhood stimulant medication treatment reduces the incidence and severity of subsequent PSUD.

As Gladwell points out, medication treatment results in complete symptom relief in only about sixty-five percent of subjects. What follows from that observation, as well as from the arguments presented above, is that we must continue to look at alternatives. There is a potent place for neurotherapy as an alternative treatment for ADHD in at least three types of individuals: (1) stimulant medication nonresponders, (2) persons with known or suspected stimulant substance use disorder, and (3) those who remain justifiably skeptical about unknown deleterious effects of long term stimulant administration

The question for the clinician (or parent or client/patient) is not whether Ritalin is good or bad therapy, as Gladwell suggests, but whether there are other therapies that are equally or even more effective for subtypes of ADHD, either alone or in combination. When dealing with an ADHD individual who is not responding adequately to medication, and who is responding to neurotherapy, then there are no more arguments to be made. In this issue of the Journal of Neurotherapy, Schulenburg poignantly illustrates that brain wave biofeedback therapy for ADHD is the only effective option for some.

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