

MRVector

Newsletter of the:

American Registry of Magnetic Resonance Imaging Technologists

Phone: 718-347-8690 Fax: 718-347-8691 E-mail: ARMRIT@msn.com Web page: www.armrit.org

Summer 2004

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- **Magnetic Resonance Spectroscopy.**
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MRA – Diagnostic and Therapeutic?

Magnetic Resonance Spectroscopy (MRS) identifies compounds, which contain resonating atomic nuclei (e.g., H1, P31, C13, Na23, K39, F19, Li7, N14 and N15), that contribute to cellular and organelle structure and function as well as to electrochemical neurotransmission. MRS, in association with Magnetic Resonance Imaging (MRI), facilitates the diagnosis of neurological conditions which include Alzheimer's disease, brain tumors, epilepsy, multiple sclerosis, stroke, schizophrenia and bipolar disorder (DD Stark and WG Bradley, Jr. Magnetic Resonance Imaging. 3rd edition, 1999).

Rohan et al. (American J Psychiatry, 161:93-98, January 2004) reported that preliminary data suggest that echo-planar magnetic resonance spectroscopic imaging (EP-MRSI) induces electric fields that are associated with mood improvement in patients with bipolar disorder (BP d/o). The Brief Affect Scale, a structured mood rating scale, was administered to subjects in three groups immediately before and after actual or sham EP-MRSI. Improvement in mood was reported as follows: 23 of 30 subjects (77%) with BP d/o who received actual EP-MRSI; 3 of 10 subjects (30%) with BP d/o who received sham EP-MRSI; and 4 of 14 subjects (29%) without BP d/o who received EP-MRSI. The EP-MRSI magnetic field (based on a 1 kHz train of monophasic trapezoidal gradient pulses) induced a 0.7 V/m electric field. The mechanism of apparent alteration of electrochemical neurotransmission manifested as mood change by EP-MRSI was not determined,

although the authors state that the change is similar to that for repetitive transcranial magnetic stimulation (rTMS).

Thus, speculation suggests that perhaps in the near future, MRI Technologists may have both diagnostic and therapeutic roles, which indicates that we will benefit from understanding the chemical principles, pulse sequences and medical applications of MRS.

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Registry Members On-Line

Now ARMRIT Registry Active members can post their resume (CV) On-Line. Go to www.armrit.org and click on '**Registry Members**'. Enter your information, work history and equipment experience for MRI employers, Government agencies and Accrediting Organizations to review.

This **member's only** service allows interested parties to perform '**Primary Source Verification**'. Those that visit the ARMRIT website and see your On-line information can immediately verify that you are Certified and Registry Active.

The ARMRIT Board of Directors and Examination Committee are encouraging 100% of the membership to utilize this important service.

Member's Rebuttal

Regarding the equivalency clause, allow me to respond to Mr. Kumar's letter in the spring 2004 MRVector since I was being addressed.

Notwithstanding the impertinence of the word, I beg his pardon-I need not educate myself with any "correct" information. On the other hand, Mr. Kumar should educate himself in the skill of argumentation and as such actually address the issue while refraining from injecting pointless trivia into a serious debate. What do I mean? (Over)

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Want examples? Ok: X-ray technologists were the first to “struggle” to learn MRI? The point is? What, that we should allow every X-ray tech to sit for the ARMRIT exam in lieu of tuition and academics out of reverence to their once pioneering, struggling forefather X-ray Technologists? Let’s see.... MRI resulted from the hard work of many scientists, scholars, etc. And? So? The relevance fully escapes me. And oh yes, multi modality Technologists are more valuable to imaging facilities? For the record, the key word is indeed “valuable”. Specialists are requisite to any top-notch operation but a “jack of all trades” saves a facility enormous amounts of money. Hence, their value. In any case, this has nothing to do with the argument. As I’ve said, we’re talking about letting a person sit for an exam that others have spent thousands of dollars and as much as two years in school to sit for. So if you want to be a multi modality Technologist, be one-but go to school like I did! Don’t ask for a free pass. And, although I never even remotely implied it, the fact that not every Technologist from MRI school is an “Einstein” nor that every X-ray Technologist who “challenges” a registry is substandard, is non-contextual. And, for the record, I painted nary a bad picture about any registry. Also, I never said guard the ARMRIT from other registries-that’s comical. I said guard the ARMRIT and respect it by maintaining the same standards as do other licensures and registries like the ARRT-that’s serious! And on that note, I never implied we should close the ARMRIT’s doors to any registry. If you want to sit for the test, put in the time!

You see, Mr. Kumar suggests I “educate” myself so as not to voice “myopic” opinions. Yet he himself addresses not a

single point that I make, or worse, twists my words and addresses the resulting distortion. I clearly offer a lucid unemotional line of reason for my opinion. In contrast, at a glance, let’s look at what Mr. Kumar offers in support of his feelings regarding the equivalency clause. He thinks someone should be given a free pass to an exam seat because X-ray Technologists struggled to learn MRI; cross-trainers are valuable; the best MRI educators have an X-ray background; MRI didn’t appear “out of a miracle”; and because scholars, scientists, et cetera, worked hard to develop MRI. Hmmm.... my “myopia” must be why I see emotion rather than substance in this argument. It may also explain why I don’t see how any of these citations have remotely anything to do with the debate at hand. Good effort, but I’m not sold. I am still waiting for someone to explain to me why we should subordinate our registry to all others by allowing something they would never, ever allow. Get it??? It’s that simple! How can one completely misconstrue a cogently stated position? As I said, no other profession’s certifying or licensing apparatus would allow a person to be grandfathered in to it’s profession, even with a test. The ARRT doesn’t. So again, why should we? If anyone thinks there is a reason we should allow something no other licensure or registry would allow, please state so in substantive terms while excluding emotional ad hominem content!

By the way, in light of his feelings on this matter, I wonder if Mr. Kumar plans to write a homologous letter to the ARRT on behalf of his soon to be ARMRIT brothers demanding we be allowed to sit for it’s MRI exam!

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