Editorial

Muscle Wasting Diseases

There are several motor neuron diseases, characterized by muscle wasting, for which there are still no generally accepted treatments. These include amyotrophic lateral sclerosis (Lou Gehrig's disease), muscular dystrophy and Huntington's disease. There is, however, clinical evidence that suggests that high doses of antioxidants and natural methyl acceptors may be therapeutic for such conditions. Unfortunately, very few physicians take such an orthomolecular approach to treatment of these disorders, probably because clinical evidence is currently out of favour and therapies are largely limited to those that are evidence-based, that is to those that have undergone clinical trials. Unfortunately, such trials inevitably overemphasize drugs that can be patented.

This profit-driven approach has slowed, if not completely halted, progress in many areas of medicine. The cost in human suffering has been enormous.

This journal issue contains correspondence sent to Andrew Saul from one of his website readers, (doctoryourself.com) that describes the prevention of muscular dystrophy, in a young child, by the use of a combination of vitamins, minerals and other nutritional supplements. The original source of inspiration for this dietary approach was Adelle Davis' book Let's Get Well, first published in 1972. Being far ahead of conventional medicine, Adelle Davis, a pioneer in health-related nutrition, was ridiculed and attacked for this and related publications. Nevertheless, it has been known since 1962 that supplementation with selenium and vitamin E could prevent muscular dystrophy in lambs. Beyond this, in 1964, Allaway and Hodgson demonstrated that the selenium content of forages had a strong negative link to the spatial patterns of muscular dystrophy in livestock.1

Another muscle wasting disease, amyotrophic lateral sclerosis, also has

recently been very newsworthy in Canada. The July 21, 2007 edition of The Globe and Mail pointed out that at least seven of the 10,500 full-time Ontario firefighters have recently developed ALS, including two pairs from the same stations. This disease is much more common amongst these firefighters than in the general population, only some six to eight people per 100,000 typically die from it in North America. Similar clusters for ALS, however, have been recorded elsewhere, for example, amongst paper mill workers. This evidence hints at, but does not prove, some sort of causal link between exposure to toxic chemicals and ALS.

In 1970, Dr. Andre Barbeau² began searching for neurological diseases that might involve dopamine deficiencies. This project was stimulated by the recent successful treatment of Parkinson's disease with the precursor of dopamine, L-DOPA.

His research team, based at the Clinical Research Institute of Montreal, examined the value of high doses of L-DOPA in the treatment of a wide range of disorders, including ALS, Steele-Richardson-Olszewski Syndrome, Torsin dystonias, Wilson's disease, Pick's and Jakob-Creutzfeldt diseases, renal malfunction, mania and depression. Barbeau's comments on L-DOPA's impact on amyotrophic lateral sclerosis are of particular interest here:

"The knowledge that symptoms of this disease (ALS) were often present in patients afflicted with Parkinson's-dementia complex led us, as a last measure, to try L-DOPA in a few advanced cases. The preliminary results were surprising, and although we do not understand them, they are of such a nature as to warrant further controlled studies."

Such additional clinical trials do not appear to have ever been carried out, probably because of the high toxicity of dopachrome, a breakdown product of dopamine and its related amines.

Nevertheless, Foster and Hoffer³ have suggested that if dopamine deficiency plays a role in ALS, there must be an obvious treatment for the disorder. Firstly, ALS patients will display evidence of elevated oxidative stress, that might be corrected with elevated antioxidants. This is, indeed, the case. Indeed, regular users of vitamin E were shown by a Harvard School of Public Health study⁴ to be less likely to die from Lou

Gehrig's disease than non-users. Secondly, it follows that methyl acceptors will decrease the formation of dopamine derived toxic methylated amines. Niacin is one of the best natural methyl acceptors. It follows then that decreasing oxidative stress by using antioxidants will decrease the toxic effect of the dopamine and it is likely that ALS patients, especially if treatment is started very early, "will benefit from high-dose treatment with selenium, cysteine, tryptophan, and glutamine (the nutrients required by the body to produce glutathione peroxidase), methyl acceptors such as thiamin, riboflavin, niacin, and coenzyme Q10, and other antioxidants including vitamins C and E.

Hoffer and Walker⁵ described one patient with ALS diagnosed about thirty years ago. He is now 84, enjoys life and has some disability from his disease. He was started on a simple orthomolecular program when first seen and that stabilized his condition. Later he complained that he could not climb hills and wondered whether there was anything more that could be done. Dr. Hoffer added Coenzyme, Q10 300 milligrams to his program. Two weeks later he was climbing hills.

In 1973 a man showing deterioration from Huntington's Disease and having lost weight from his normal 165 pounds to 135 pounds came with his wife to see Dr. Hoffer. He advised them he had not seen any patients with HD before and did not know if my program could help. His wife said she knew that but wanted to try it anyway. Dr. Hoffer started him on an orthomolecular program excluding vitamin E. His strength returned but he kept on losing muscle mass. After a few months Dr. Hoffer added vitamin E to his program. When this was increased to 4,000 IU daily he gained weight and appeared healthy. He had even been shingling his own roof. Dr Hoffer concluded that he had a double dependency on vitamin E and on niacin. The vitamin E was needed for his muscle wasting and the niacin for the schizophrenic symptoms that Huntington's patients develop. Since then several more patients with diagnosed Huntington's Disease have recovered on similar orthomolecular treatments.

Where there is no known successful conventional treatment for an illness, there is no logical excuse for an unwillingness to experiment on the basis of individual success stories, reported by physicians. In this way, a large body of evidence can be collected that would almost certainly be more valuable than clinical trials designed to assess specific new drugs.

-A. Hoffer, M.D, Ph.D.

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Safety and Effectiveness of Vitamins

"What use do you make of your physician?" said the king to Molière one day. "We chat together, sire; he gives me his prescriptions; I never follow them, and so I get well."¹

Adverse drug side effects are the proverbial elephant in the living room: everyone knows the problem is there, and hopelessly tries to work around it. Physicians attempting treatment through a haze of side effects still have an easier time than do patients actually living with side effects. The outlook is especially grim for psychotic patients who are treated with drugs only: they rarely improve, and all too frequently get worse.

There are two well proven-alternatives. The first is to do no harm by doing nothing. While such treatment rarely justifies a physician's fee or a pharmaceutical company's advertising budget, it frequently works. Indeed, long before Molière and in the centuries since, cultural records show that compassionate, common-sense care can and does allow people to heal. Patients treated without drugs are also patients without drug side effects. Often they are also quite well. It's an old psychiatrist's joke that just because you are paranoid doesn't mean they are not out to get you. Oddly enough, a current televised drug advertisement ominously proclaims that just because you are feeling better doesn't mean you don't need medication. That may be quite untrue. Recently, Harrow and Jobe "studied whether unmedicated patients with schizophrenia can function as well as schizophrenia patients on antipsychotic medications." The indications are that they surely can. In fact, "A larger percent of schizophrenia patients not on antipsychotics showed periods of recovery and better global functioning."2

A second, and better, alternative to drugs is to employ orthomolecular therapy. Psychotic patients treated with orthomolecular doses of nutrients are much more likely to recover than unmedicated patients. Even very high doses of supplemental nutrients are safe. It is those high doses that are also most effective. Furthermore, patients so treated characteristically experience side benefits rather than side effects. If medication is necessary as well, providing supplemental nutrients can improve outcome, often while reducing the drug requirement. Orthomolecular nutrition also reduces drug side effects.³

No one in their right mind, or wrong mind, wants harmful side effects. Adverse drug events are routinely accepted and heroically endured, even though, reports the Associated Press, "More than 1.5 million Americans are injured every year by drug errors in hospitals, nursing homes and doctor's offices, a count that doesn't even estimate patients' own medication mix-ups...(O)n average, a hospitalized patient is subject to at least one medication error per day."⁴ More than 100,000 patients annually die, just in the USA, from drugs properly prescribed and taken as directed.⁴

On the other hand, a review of poison control center reports reveals that vitamins have been connected with the deaths of a total of ten people in the United States over the last 23 years.⁵ The American Association of Poison Control Centers (AAPCC), which maintains the USA's national database from 61 poison control centers, alleges the following number of deaths from vitamins in each given year:

2005: zero	
2004: two	
2003: two	
2002: one	
2001: zero	
2000: zero	
1999: zero	
1998: zero	
1997: zero	

1996: zero 1995: zero 1994: zero 1993: one 1992: zero 1991: two 1990: one 1989: zero 1988: zero 1987: one 1986: zero 1985: zero 1984: zero 1983: zero

The zeros are not due to a lack of reporting. AAPCC has noted that vitamins are among the 16 most reported substances. Even including intentional and accidental misuse, the number of vitamin fatalities is strikingly low, averaging less than one death per year for more than two decades. In 16 of those 23 years, AAPCC reports that there was not one single death due to vitamins.

Yet a harmless niacin flush is often seen as sufficient justification to discontinue B_3 therapy. Some physicians declare that they do not "believe" in treating with vitamins. What a curious endorsement of evidence-based medicine. Unless one chooses to consult a shaman, belief should have little to do with treatment.

Traditionally and to this day, much medical knowledge comes from physician reports. This journal publishes a lot of them. Physician reports are neither double-blind nor placebo controlled. They are the valuable experiences of qualified observers. They are valid. Just ask the patients that got better. Yet doctors' reports, as well as those of their patients, are typically marginalized as mere "anecdotes." "Where are the good old days," says Abram Hoffer, "when honest physicians honestly reported what they saw in language than any doctor could understand?"

New and more costly drugs have

come and gone, along with their new and more costly side effects that also come, and all too often stay. Oliver Wendell Holmes, M.D., famously wrote: "If we doctors threw all our medicines into the sea, it would be that much better for our patients and that much worse for the fishes." Indeed, side effects may make it impossible for patients to recover. We need to consider the full metabolic impact of decades of drug maintenance. Creating chronic patients with iatrogenic chronic diseases is no cure at all.

Pecuniary motivation aside, we might say that the pharmaceutical industry is at least in part made up of people who truly want to end suffering and disease. The same may be said of practicing health providers. It is certainly true of families of sick people, and of patients themselves. Good intent is not enough; Samuel Johnson commented that the road hell is paved with good intentions.

The search for truth has been likened to riding around on an ox in search of the ox. A healed patient is the best data. Always has been; always will be. Rather than reinvent the wheel, we need widespread use of what works. The psychiatric profession has right at hand a very safe and very effective nutritional treatment for psychosis. It is gram-sized doses of niacin. We do not need more research; we need to apply the research already done by Hoffer, Osmond, and others decades ago. The problem, Hoffer has observed, is that no amount of evidence can persuade someone who is not listening.

-Andrew W. Saul, Ph.D.

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