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MS Up-Date

Hi, I'm Dr. Kukurin and you are receiving this newsletter as a free gift from my office. We spend a lot of time working on this publication. I'm sure you will enjoy it. It contains much of the same information my patients pay $57 for in consultation at my office. So please if you can't use it, pass it on to someone who can.

Journal of Rapid Pain Relief

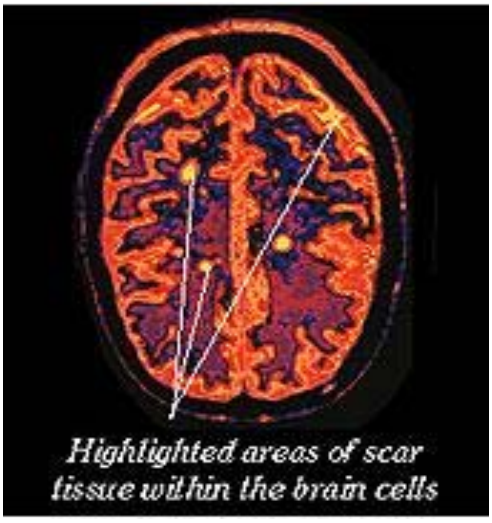
Effective Home Remedies that Doctor's Give Their Patients

New research ties vitamin D to the development and pathology of Multiple Sclerosis. When I was studying neurology at the Parker College in Dallas Texas, I was always fascinated by the fact that a person's chance of developing MS seemed to be tied to his/her place of birth. Research suggested that differing parts of the country had differing rates of MS. If you were born and lived (to about the age of 11) in a particular part of the country, you would have a chance of developing MS at a rate that was inherent to that part of the country. It did not matter where you moved to after you were a young adolescent, but where you were born and raised was the important factor. I was always puzzled by this data. I thought that maybe it had something to do with the nutrients in the soil or maybe toxins in the environment. Well now 15 years since I've finished my neurology training, science may have the answer. It seems that vitamin D may be responsible. See vitamin D is created in our bodies when sunlight interacts with our skin. And as a child ages and his or her immune system develops, it appears lack of vitamin D may contribute to immune system abnormalities that can lead to MS. It appears that vitamin D is important for healthy immune system function and that lack of vitamin D in the immature immune system can lead to auto-immune diseases and conditions like MS. That's the bad news. The encouraging news is that supplementing the diet with non-toxic water soluble vitamin D shows promise as a potential treatment of MS.(3) In the animal model of MS (Experimental Autoimmune Encephalopathy or EAE), vitamin D seemed to suppress symptoms.(3) There is other encouraging news related to dietary supplements and their possible role in alleviating MS signs and symptoms. See the damage to the nervous system in MS patients is complex. However, these complex interactions also afford a variety of avenues to try and help MS patients. There is the immune dysfunction associated with vitamin D that we discussed above, but there is also the secondary effects of immune interactions that may be therapeutic targets for MS patients.

This issue: *Alternative Medicine Info* to help people suffering from **Multiple Sclerosis**

Alpha lipoic acid, a compound found in health food stores, has been shown to prevent much of the secondary damage in the brain and spinal cord of animals with EAE. (6-9) Recently, humans trials of ALA have begun and appear promising. (9) Another health food store supplement N-acetyl cysteine (NAC) seems to also prevent secondary damage in the nervous system as demonstrated in animals studies.(13)

Other promising therapies include **oral tolerance**, which tries to de-sensitize the immune system to the patient's nervous system by giving pills containing myelin protein. (11) S-adenosylmethionine (SAMe) seems to help with remyelination of damaged nerves.(10) And two herbs common to Alzheimer's research, Huperzine and Vinpocetine appear to reduce the relapse rate in patients with MS (12) from an average of 3 relapses per year to less than one. (12)



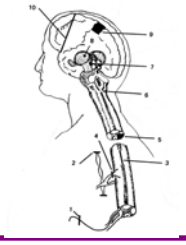
The main thrust of research in multiple sclerosis is attempting to limit the build up of plaque or scar tissue in the nervous system. The search is on for so-called biological response modifiers.

Growing awareness that chiropractic may improve function in MS patients.

While chiropractic manipulation does not effect the underlying disease process of MS, there are more and more reports appearing in the medical literature that suggest chiropractic can help MS patients function better. (19, 20)

Spastic muscles and intense fatigue are two of the more debilitating signs and symptoms in patients suffering from MS. The drug Amantadine, has helped many patients with the extreme fatigue of MS. Recently a clinical trial of the dietary supplement acetyl-carnitine, demonstrated that the supplement was more effective and carried less unwanted side effects than Amantadine treatment. (16) Acetyl Carnitine also shows promise in nerve repair in diabetic patients. (17) So it may also theoretically be useful for nerve repair in MS patients.
Another promising method for relieving muscle spasms in MS patients is electrical nerve stimulation or TENs. In this treatment, electrical stimulation is applied to nerves and muscles. This stimulus is applied at a frequency of 100 Hz and pulse width 0.3 msec were used 20 minutes per day for 4 weeks. Patients were assessed by electromyography. The Modified Ashworth Scale and Ambulation Index were used before and after 4 weeks of treatment. After 4 weeks of treatment, there were statistically significant reductions in spasticity of both extremities as assessed by myo-electric activity and the Modified Ashworth Scale ($P < 0.05$). Specific exercises may also improve the quality of life and/or functional ability of MS patients. Care of MS patients require a combined approach. (22-23)

MS patients have visible plaques that form in their brain and spinal cords. Cutting edge therapy hopes to diminish or completely prevent these plaques from forming. The symptoms vary depending upon the location of the damage in the nervous system. **(right).**



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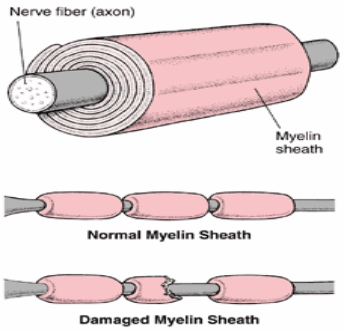

Damage to the myelin sheath, which acts like insulation on an electrical wire, causes "short circuiting" of the nerves and leads to the symptoms of MS. Note the normal and damaged (demyelinated) nerve axons in the picture to the left.

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