

Multiple Sclerosis Positive Options for a Better Life

by Xandria K. Williams

M.S.

Multiple Sclerosis is a disease of the nervous system, in which the myelin sheath that surrounds and protects the nerve cells, is damaged or faulty, and as a result the correct nerve messages no longer pass along the nerve cell. It is thought to be the greatest single cause of disability in young adults today (it commonly starts between the ages of 20 and 40), and has been called our "foremost neurological problem".

Because it starts in young adulthood, it strikes many mothers with dependent young children, and many fathers with dependent families. Thus in addition to the direct distress to the sufferer, there is also the hardship and sorrow for the close relatives, which in turn causes more distress, and possibly feelings of guilt and inadequacy to the sufferer. Because the other parent must be both bread winner and home provider, money is frequently a problem. This makes many of the treatments outlined below difficult because (like all treatments) they do cost money but (unlike conventional medicine) are not covered by all insurance funds, although the situation is improving as more enlightened private health insurers offer ancillary tables for natural therapists.

There is another problem with Multiple Sclerosis: with most diseases or illnesses you either have it or you don't; you are either getting better, staying the same, or getting worse. Things are not so clear cut with Multiple Sclerosis. Diagnosis is difficult and vague, and still only rests on neurological deficits in different locations and at different times. There are no specific laboratory tests for M.S. In the early stages, the diagnosis is only "probable". It has to be reasonably bad before the diagnosis is firm — a case of "the worse you get the surer they are you've got it".

Also Multiple Sclerosis is well recognised as a disease that can have sudden periods of remission and exacerbation, without external cause. Thus in many cases it is difficult to

assess the effectiveness of a therapy. It is well recognised by practitioners in the natural therapy fields that if a patient with an "incurable" illness gets better after their treatment, it is frequently classified by the sceptics as a "misdiagnosis" in the first place, or a "spontaneous remission".

This means that if someone is thought to have M.S., but it is mild, and they try one of the treatment programmes I will be discussing, and get better, the sceptics will not believe they had it in the first place. It also means that many people who have pioneered some of these methods, either on themselves or on other people will be similarly brushed aside, along with the therapies. Similarly if a confirmed sufferer tries some of the treatments and improves, the sceptics are likely to claim that it is one of the natural, spontaneous remissions — for indeed it could be. However the therapies outlined below are claimed by their proponents to have resulted in a surprisingly high frequency of so-called "spontaneous remissions", and been carried out by a surprisingly high number of people with so-called "misdiagnosis".

In other words, many of these treatments considerably improve the averages and odds, and there is a very good chance that there really is some positive benefit to be reaped from them. In addition none of the suggested treatments do any harm. Since conventional medicine has nothing substantial to offer in many cases (although much interesting research is being done) they are well worth a try. In fact the overall picture does seem to suggest that the use of diet and nutritional supplements has shown the best results so far. (But before you rush off and try some of these ideas on yourself, if you have M.S., you should consult a practitioner who can guide you).

Lead Poisoning

Some of the symptoms of lead poisoning are very similar to those of Multiple Sclerosis. These include emotional upsets, nervousness and

irritability, visual problems, dizziness, fatigue, poor co-ordination and muscle weakness, and muscular aches and pains. It is possible to be diagnosed as suffering from M.S. when the correct diagnosis is in fact lead toxicity.

It is recognised that M.S. is more common in areas where there are high lead levels in the soils, and hence in the locally grown foods, and where there are particularly high levels of lead in the environment in general. Professor Warren of the University of British Columbia reported in *Nature* magazine in 1959 that "most areas where there is a high prevalence of M.S. coincide in a highly suggestive fashion with areas where glaciation has played an important part in providing parent materials for soils... (with) higher than normal quantities of lead".

This similarity of symptoms triggered a study that was reported by A.M.G. Campbell and others in the British magazine "Brain" in 1950. They found that lead content of the teeth of M.S. sufferers to be significantly higher than that of people in the control group who did not have M.S. In eight areas in the U.K. where M.S. prevalence is high, the rock, soil and food lead levels were found to be between 2.5 and 10 times normal; and many other countries have shown similar results.

Some workers in the field feel that lead in some way interferes with enzymes or coenzymes involved in the formation and maintenance of the myelin sheath round the nerves. Testing for lead is not difficult and should be considered by anyone who is thought to have M.S. A simple blood test for lead is helpful, and an analysis of head hair gives an indication of the amount stored in the body's tissues.

One of the problems with lead is that it is similar in atomic structure and size to calcium. Thus it can replace calcium in the bones, which become stores of lead, building up over the years. This effect is magnified if a person is calcium deficient,

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and this is common in our society since the diet is usually low in calcium and high in phosphorus which further aggravates the calcium deficiency. Again, because of this similarity, Vitamin D increases the body's absorption of lead, and it is noticeable in temperate climates that lead toxicity comes to light at the end of summer, when the skin has been exposed to the sun, and extra vitamin D synthesised.

If high levels of lead are present in the body there are a number of treatments available that can reduce them, and these should be investigated, including a program of zinc supplementation under professional guidance.

Allergies

Many research workers have shown a relationship between M.S. and allergies, including environmental allergens such as grasses, moulds and pollens, and food allergies. A number of people have reported an improvement in their symptoms when they gave up certain foods. These may be wheat, other grains, milk and dairy products, oranges, chocolates, potatoes...etc. Many have thus claimed as a result that "people with MS should not eat so and so". In fact it is likely that individuals will vary in the food or foods to which they are allergic, although some foods cause allergy problems more often than others.

M.S. is more common in countries where rye is a staple grain, than in those where rice is eaten. Wheat is also a commonly implicated allergen. A totally gluten-free diet has been recommended for M.S., and claimed to have shown good results. If so, it is possible that this is an extension of the allergy concept, or a particular type of allergy problem.

Blood Sugar Levels

A high proportion of M.S. sufferers have been shown to have abnormal blood sugar levels. This is significant because the nerve cells only use glucose for energy and if the blood glucose levels fall the nerves do

not function correctly — as any sufferer from hypoglycemia knows.

It is also significant that many people with hypoglycemia, or unstable blood sugar levels, suffer from allergies as well. In fact many people find that their hypoglycemia is caused by their allergens, and that when they remove the allergens from their diet, their blood sugar levels are much more stable and that the symptoms of which they originally complained disappear. Similarly these two problems may be related in M.S.

Infectious Causes

An interesting study done at Harvard Medical School showed that there is increased risk (1.7) of M.S. in people whose tonsils have been removed. In other words, M.S. victims had a significantly higher incidence of prior tonsillectomy than non-sufferers. A similar result was found when the incidence of appendectomies was studied. It is possible that an infective agent, possibly a virus, is involved and is responsible for the initial infections in the organs, and subsequently leads on to M.S., which only becomes obvious at some later stage. The measles virus, Herpes virus and Coxsackie virus have been implicated.

If this is so then the use of treatment with vitamin C as ascorbic acid to bowel tolerance would be worth studying, as this is recognised, among orthomolecular practitioners, as being a potent anti-viral weapon. This means taking vitamin C in gram quantities until the body's tissues reach maximum saturation, which is signalled by mild diarrhoea, which is reversed by a reduction in dosage.

Ammonia Toxicity

A 1954 study in California appeared to indicate that ammonia could be damaging the nerve cells. Ammonia is a normal byproduct of the breakdown of protein, and is itself metabolised in the liver, where it is converted to urea, ready for excretion via the kidneys. In a number of M.S. patients it was found that the ammonia accumulated in the nerve cells, rather

than being removed by the normal processes. The researchers found that intravenous injections of succinate (a substance found in all cells as part of the normal processes) increased the removal of ammonia. There appears to have been little follow-up work done on this mechanism.

Methanol Hypothesis

This hypothesis suggests that methanol, which is produced by the metabolism of pectins, is converted into formaldehyde. This in turn can bind with the myelin of the nerves and lead to tissue damage. Fructose is thought to aggravate this effect by blocking the breakdown of formaldehyde.

If this hypothesis is valid it would mean a diet with little or no fruit as fruits are sources of pectin and fructose, and no sugar (sucrose) which consists of a dimer of glucose and fructose. A clinical trial of this diet did not appear to produce marked benefit, and the total avoidance of fruit could significantly reduce the amount of a number of the micronutrients in the diet. However, like all other hypotheses suggested, it bears consideration by anyone wishing to explore different therapies.

Treatments

Literally hundreds of different therapies have been tried for M.S. The ones we will be considering below are mainly ones involving diet or supplements.

Vitamins and Minerals

Examples of marked improvement following treatment with Thiamine hydrochloride (B1), Niacin (B3), Pyridoxine (B6), cobalamine (B12) have led a number of people to plan supplement programmes, with varying degrees of success. One of the most comprehensive of these programmes, and one that is claimed to have produced exceptionally good results is that suggested by Dr Frederick Klenner of North Carolina. He goes so far as to claim that "There is a cure for multiple sclerosis". His programme definitely comes into the category of

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megavitamin therapy and consists of several grams of thiamin, niacin, pyridoxine, cobalamine and several milligrams of riboflavin, magnesium, calcium, and calcium pantothenate.

These are given orally, intramuscularly and intravenously. In addition injections of crude liver, and Adenosine-5-monophosphate are given. The amino acid glycine is given in powdered form, together with a high protein diet, and a strong trace mineral supplement.

Dr Klenner has spelt out his reasons for each part of the treatment programme, and is strongly opposed to the use of ACTH as a medication; and suggests that multiple sclerosis is caused by the Coxsackie virus.

There have been suggestions that a number of mineral deficiencies are implicated in M.S. These include, potassium, calcium and magnesium, manganese and zinc. It is relatively simple to get an estimate of the tissue levels of a number of minerals by analysing a sample of hair. If any mineral is deficient, these levels should be corrected. Whether or not additional amounts would have therapeutic value is a matter for debate at this stage. One or two pathology labs in Australia are now able to perform hair mineral analysis which should be evaluated by a trained practitioner.

Orotic Acid

It has been suggested that Orotic Acid is helpful in the treatment programme. It may act by transporting essential minerals into the tissues, including the brain and nervous tissue. It is interesting to note that orotic acid occurs in relatively high concentrations in root vegetables which are an essential part of Dr Evers therapy, discussed below. Orotic acid is a particularly good carrier of calcium and magnesium which are essential for the proper function of the myelin sheath of nerves.

Lecithin

The messages that pass along the nerve cells are carried from one cell to the next by substances called

neurotransmitters. One of the most common of these is acetyl choline. The choline part of this molecule is the same that occurs in phosphatidyl choline, also known as lecithin. It is well worth adding this to the diet, not only for people suffering with M.S., but for everybody, for it serves a wide variety of functions in addition to the synthesising of acetyl choline — it also helps improve liver function, and the body's ability to handle fats.

Essential Fatty Acids

Many M.S. sufferers have been shown to be deficient in the essential fatty acids. These are used by the body to make the many series of prostaglandins that are molecules that control the body's functions on a micro scale, somewhat similar to the way the hormones control function on a larger scale. Thus it was argued that treatment with these substances would be of benefit.

Initial therapeutic trials were done using *Sunflower* oil which is an important source of linoleic acid. The symptoms were reduced, and relapses were less common and less pronounced in the trial group, compared to controls. *Evening Primrose* oil, another rich source of linoleic acid, plus other important fatty acids, has also been used with some success in the treatment of M.S. Other studies have indicated that best results will not occur until after two years of treatment, thus anyone using essential fatty acid supplements should use them for at least this period. Other sources include Apricot Kernel Oil and even avocados.

Octacosanol is a long chain alcohol, similar in length to the fatty acid, octacosanoic acid. The rationale behind the use of this substance in treatment is based on the suggestion that there is a disturbance of the normal incorporation of fatty acids into the myelin sheath in M.S., and that the use of the equivalent alcohols may help to rectify this. So far there appears to be grounds for

cautious enthusiasm for this treatment.

SOD and DMSO

Two compounds readily available in America in health food stores, but as yet unavailable here are superoxide dismutase (SOD) and dimethyl sulphoxide (DMSO).

Superoxide dismutase is an enzyme (coenzymes for it are copper, manganese and zinc) that is involved in scavenging toxic free radicals, and it is thought that free radicals may cause some of the damage of M.S., certainly they are damaging to body tissues in general.

Dimethyl sulphoxide is a strong solvent and has been used to carry nutrients into the body rapidly through the skin. This method is said to have the additional advantage that the nutrients can be targeted directly to the areas of the body where they are wanted. For instance it is used to carry nutrients into joints affected by arthritis. It may have an immunosuppressive action and be useful in suppressing autoimmune diseases.

In mega-vitamin therapy DMSO is said to be able to reduce the amounts of nutrients needed by increasing their percentage absorption (either orally or topically).

Digestive Enzymes

Poor digestion of food can lead to a number of problems relevant to a person suffering from M.S. Firstly it leads to a reduced supply of the essential nutrients, as some of the amount consumed is likely to be excreted rather than absorbed. Secondly, if there are allergies, the reaction is likely to be stronger if food is absorbed as complexes called chylomicrons, and there is an increased level of chylomicrons in M.S. patients. It is possible that all these problems could be reduced by the use of digestive enzymes. In addition the chylomicron level could be reduced by the use of lecithin, and a number of the B group vitamins that are needed by

Nutritional Prescription for M.S.

Dr. Carl Pfeiffer, recently in Australia on a lecture tour for an International Nutrition Conference, and founder of the Princeton Brain Bio Center in the U.S.A., recommends the following dietary supplementation regimen for M.S. sufferers who may also have pyroluria (approx. 50%)*:

1. Safflower Oil daily,
2. Vitamin B₆, up to 2 grams (2000 mg) daily
3. Zinc/manganese fortified
4. Zinc gluconate, 30 mg at bedtime
5. Lecithin, three times daily.

Pyroluria is caused by a toxic pyrrole excreted in the urine and

the liver, and are important in the proper metabolism of lipoproteins (the fat carrying entities in the blood stream).

Wholefood Diet

Claims have been made that M.S. is one of the many degenerative diseases caused by our extensive use of chemical fertilisers and pesticides, and all the other man-made chemicals that are now added to nearly everything that we eat and drink. Certainly the incidence has increased rapidly in the last few decades, and is still on the increase.

Dr Evers in Germany, who has treated several hundred M.S. sufferers, has devised a diet consisting of the following: raw fruits, nuts, and root vegetables, raw milk and rye and wheat, and (truly) wholemeal bread, made from only organically grown ingredients. This is a very strict diet, unappealing to many people, but his results are impressive, and at least this therapy is not expensive. In addition to the diet, Dr Evers recommends plenty of exercise and plenty of rest.

People suffering from M.S. who have tried this diet and reported improvement, find that they stay well as long as they are on the diet; but that if they go back on to a diet of refined foods their symptoms return. If this is so there would seem to be either substances in the Evers diet that are essential to the patient's health, or substances in the refined food diet that are detrimental to their health. It would surely be of benefit if some of the research funds devoted to this disease were spent in investigating these dietary factors.

Low Fat Diet. In 1950 it was recognised that M.S. is more common in cultures that eat a high fat diet, than in those that include only small amounts of fat in the diet. This has led to the use of a low fat diet, with particular emphasis on a major reduction in animal fats, and a moderate reduction in plant oils. Remember that it is necessary to get adequate amounts of the essential fatty

acids, and these come mainly from plants, though oily fish are especially rich in some of them.

Chelation Therapy

Chelation therapy is coming to the fore, and has been much in the news recently. One of its functions is to decrease the calcification of the artery walls, thus increasing circulation to the tissues. Chelation therapy has been shown to reduce the symptoms of M.S., and this increased circulation and the resultant increased availability of nutrients to the tissues, may be the mechanism by which it is helping. In addition chelation therapy is one of the ways of reducing the body burden of lead if it is high, and as we saw above lead toxicity can mimic M.S., and may even be a sub-category of M.S.

Chelation Therapy is an intravenous system which must be medically supervised in a clinic, although there are only two operating in Australia, one in Brisbane and one in Sydney and another in New Zealand.

Cold

Exposure to high temperatures worsens the condition for most sufferers. As a corollary immersion in cold water has been found to be helpful, although the effect tends to be temporary. Nerves that are marginally operative can be blocked by temperature increases, but will conduct when the temperature is lowered.

Hyperbaric Oxygen

An interesting procedure that I observed in California recently is the use of hyperbaric oxygen. In this procedure the patient is placed in a sealed chamber, in which they breathe oxygen at pressures of 2 to 2.5 atmospheres. Significant improvement has been reported from this technique, but again the result is only temporary. However there is usually a rapid response to follow-up treatments.

Conclusions

Clearly we can offer no clear cut cure for this distressing illness.

known as the "mauve factor". It is also a condition in some cases of schizophrenia and in most alcoholics. It results from the inability of the intestinal tract to metabolise vitamin B₆ (pyridoxine) and zinc.

Pyroluria can be diagnosed by pathology tests.

* excerpted from The Golden Pamphlet, © Princeton Brain Bio Center 1980.

However it does seem as if diet, nutritional supplements, and other natural therapies have a considerable amount to offer. Many sufferers claim to have experienced considerable benefit from many of the treatments mentioned above. They are harmless, and frequently appear to reduce some of the symptoms. They also offer hope, and a choice of positive actions that can be taken, with a real possibility of benefit. And even if they do not cure the disease itself, they frequently increase the overall general health and increase the feeling of wellbeing and a positive outlook.

Almost anything has to be better than a book on the subject that I came across recently which gave a long list of suggested therapies, and labelled nearly all of them "ineffective in the treatment of M.S."

Inevitably, in a disease for which there is, as yet, no cure, many, many treatments have been proposed. The above is only a sample of them, and careful reading by those interested will show them more. Rather than to list all the proposed regimes, I have endeavoured to show the sufferer, and those interested, that there are a number of avenues to pursue, that many people have claimed to benefit from one or more of a wide variety of approaches to treatment and management of M.S. and that there is certainly no reason to give up hope, or do nothing. Most importantly, stress must be removed and a peaceful, healing environment created in every possible way.

The general guidelines for M.S. treatment should, as always, be:

First do no harm.

Give hope.

Improve general health.