

Intravenous Nutrient Protocols For Chronic Fatigue States

From the book, *The Canary and Chronic Fatigue*
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Intravenous Nutrient Infusions Can Jump Start Cellular Enzymes in Chronic Fatigue

I begin my discussion of the clinical value of intravenous nutrient infusions (IV drips) by making four important points:

First, IV nutrient therapies are not essential for mild to moderate cases of chronic fatigue. In general, such cases can be managed successfully with nondrug therapies outlined in this volume without IV nutrient infusions – especially when the energy and detoxification enzymes have not been further damaged by prolonged drug therapies.

Second, IV therapies can greatly expedite recovery in moderate to severe cases of chronic fatigue. Thus, nondrug therapies, when administered with IV infusions, often produce the same clinical benefits in three to six weeks as they do in three to six months when IV infusions are withheld.

Third, IV therapies in severe to very severe cases are essential for reviving badly damaged enzymes.

Fourth, IV therapies described in this article – and others described in my monograph *Intravenous Nutrient Therapies in Molecular Medicine* – are safe and effective when careful attention is paid to all the details. The uncommon untoward effects of such therapies are minor and self-limiting. In my extensive personal experience with such therapies, I have not had to institute any interventional medical or surgical measures to manage such untoward effects in a single patient to date.

Later in this article, I describe the composition of some intravenous nutrient protocols I use for my patients with chronic fatigue. For the professional reader – and the general reader with a biology or medical background – I recommend my monograph *Intravenous Nutrient Protocols in Molecular Medicine* published by Life Span, Inc., Denville, New Jersey; (800) 633-6226. In that

monograph, I discuss several issues essential to safe and effective IV therapies, such as the composition of various protocols, preparation of protocols, solution osmolality, vein access, management of untoward reactions, proper informed consent, and other related subjects.

Frequency of IV Infusions

A vast majority of chronic fatigue sufferers require only a course of five IV nutrient infusions, administered twice weekly. Such patients often require some additional intramuscular injections of magnesium, potassium, calcium, and vitamin B12. Uncommonly – in less than 5% of patients – I find it necessary to administer a second course of five infusions. Patients with severe chemical sensitivity sometimes require prolonged IV therapy, as much as 20 or more infusions.

Following initial IV infusions, most chronic fatiguers can be managed with optimal food choices, oral nutrient protocols, immunotherapy for IgE-mediated allergies, environmental controls, self-regulation and special slow, sustained physical exercise. Still, I emphasize to my patients that if there is any recurrence – and most chronic fatiguers are prone to some recurrence – they should not delay IV therapy unnecessarily. Early recurrences can usually be managed expediently with just one or two IV infusions.

IV Therapy for Viral Infections

Chronic fatiguers cannot afford slow recovery from common viral infections. Increasingly, I see patients who consult me for viral infections that do not clear for weeks and months and leave behind persistent cough, muscle weakness and aches, irritability or abdominal symptoms. I have seen many cases in which months of restorative work went down the drain when viral infections were aggressively treated with broad-spectrum antibiotics by physicians unfamiliar with the special problems of chronic fatiguers. Human canaries, I write earlier, have peculiar vulnerability to broad-spectrum antibiotics. I strongly urge my patients to receive an IV infusion if there are no clear signs of a viral infection letting up within 48 to 72 hours. In such cases, I use infection control IV described later in this chapter.

Seeking Out the Right Physician

This is a major problem facing chronic fatiguers at present. There is a severe dearth of physicians who are knowledgeable and experienced in management of several molecular and practical issues of IV nutrient therapies. On a positive note, a growing number of physicians are beginning to recognize that chronic fatigue is linked to nutrition, environment and stress, and that these problems will continue to have a significant impact on chronic fatigue. More important, none of these issues can be addressed with drug therapies. Such physicians are turning to nutrient therapies. I am comfortable predicting that

within the next twenty years, intravenous nutrient therapies will become mainstream therapies.

For several years, I have conducted IV therapy courses for chronic fatigue and related disorders at the annual meetings of the American Academy of Otolaryngic Allergy (AAOA) and at the Institute of Preventive Medicine (Denville, New Jersey.) During these years, I have also taught such therapies at the Instruction Courses of the American Academy of Environmental Medicine (AAEM). I use my monograph *Intravenous Nutrient Therapy in Molecular Medicine* as a comprehensive syllabus for teaching these courses. This monograph is published by Life Span, Inc., and may be obtained by physicians as well as the general reader by calling (800) 633-6226 or (201) 586-9191.

IV therapy for chronic fatigue states and the related disorders is not an area where physicians who do not practice nutritional medicine can, on short notice, acquire the necessary depth of perspective. Fortunately, and judging from the calls my office gets for information about IV therapy, a growing number of physicians recognize this and are receiving training in such therapy.

It is my sense that it is not hard now for anyone to find a physician experienced in IV nutrient therapies in most parts of the United States. More important, a growing number of physicians are now willing to consider my IV protocols when their patients plead for such therapies. The number of calls our staff receives in this context is also increasing.

Indications for IV Therapy

In my clinical practice, I have observed good results with intravenous nutritional supplements for a host of clinical disorders commonly associated with chronic fatigue states. Similar clinical benefits have been obtained by many other physicians who are well-versed in the principles and practice of nutritional medicine.

Chronic fatiguers commonly suffer from various types of immune and degenerative disorders, bowel disorders and recurrent infections. Such disorders frequently require multiple drug therapies. Yet, they need to avoid drug therapies as much as possible. The judicious use of optimally formulated intravenous nutrient protocols is extremely valuable in this context. Following are some of the disorders for which I have observed satisfactory clinical benefits either without or with minimal reliance on drug therapies:

- 1. Acute viral infections where the commonly used antibiotics are of no significant value.**
- 2. Altered states of bowel ecology. These states include a host of entities including, but not limited to, multiple food allergies, malabsorptive dysfunctions, recurrent episodes of *Candida* overgrowth or infection, *C. difficile* colitis, antibiotic-associated colitis, and bowel parasitic infestations such as *Entamoeba*, *Giardia*,**

Blastocystis, Endolimax and others. It also includes different variants of chronic bowel inflammatory disease such as ulcerative colitis and Crohn's colitis. I discuss this subject in detail in the companion volume *Battered Bowel Ecology – Waiving Away a Wandering Wolf*.

- 3. Asthma and incapacitating bronchospasm associated with pulmonary emphysema.**
- 4. Autoimmune and immunodeficiency syndromes.**
- 5. Bacterial infections under treatment with appropriate antibiotics. The purpose here is to protect the tissues from drug toxicity.**
- 6. Major surgery (before and after). The purpose here is to facilitate and expedite wound healing. It provides a counterbalance to the oxidative and other molecular stresses caused by the surgical procedures.**
- 7. Major chemical exposures.**
- 8. Major food and inhalant allergy reactions.**
- 9. Heavy metal toxicity and heavy metal overload without clinical evidence of enzymatic inactivation.**

Goals of IV Therapies

The goals of intravenous nutritional therapy are in essence the same as goals for oral nutritional therapy. The main difference, obviously, is the time frame, immediacy of the desired nutritional support and the intended clinical results. Following are the principal goals for such therapy.

First, to bypass the bowel mucosal barrier, to circumvent absorptive dysfunctions, and to deliver the nutrients directly to the tissues.

Second, to deliver the necessary nutrients to the tissues in optimal proportions, concurrently and for maximal synergistic effects.

Third, to restore the functional integrity of enzymatic pathways in chronic disorders known to result in vitamin, mineral and amino acid deficiencies.

Fourth, to eliminate the need for drugs when feasible.

Fifth, to reduce the dose of needed drugs during the early period of caring for a patient.

Sixth, to protect tissues from injury caused by chemotherapy and radiotherapy.

Seventh, to expedite recovery from acute infections.

Eighth, to provide healing tissues extra supplies of nutrients before and after surgery (times of increased demands).

Nutrient Gradient

I indicated earlier that the intravenous nutrient protocols described here are not intended to correct any nutrient deficiencies. Rather, these protocols are used to create a high gradient of nutrients across the cell membranes to deliver “nutrient boluses.” In chronic fatigue states, there are often large functional differences between the intra- and extra-cellular compartments even though blood and cellular mineral levels may not appear significantly different from each other. The demands of cells for such nutrients are high, and IV therapies are designed to meet such demands. My colleagues in nutritional medicine and I regularly see the clinical proof of such states when chronic fatiguers respond well to IV infusions.

There are two critical issues:

First, flushing the tissues with a high gradient of various essential nutrients.

Second, concurrent availability of nutrients in optimal proportions.

Vitamins, minerals, and amino acids administered intravenously are very effective for short-term nutritional support in acute exacerbations of chronic disorders. These protocols are also very effective in clinical situations where serious damage to the immune system is anticipated, i.e., as with chemotherapy and radiotherapy for cancer and extensive surgery for various diseases.

The intravenous route of therapy, bypassing the bowel mucosal barrier, eliminates all problems of absorption. It allows expeditious delivery of these essential elements to all the tissues. Furthermore, IV therapy provides the tissues necessary nutrients, concurrently and in the proper proportions.

Phlebitis and Phlebothrombosis

Phlebitis is a term used to indicate inflammation of veins.

Phlebothrombosis is a term used to indicate formation of blood clots in the vein lumen. These two terms are often used interchangeably because blood clots within the vein invariably lead to some inflammatory response.

All patients requiring intravenous infusions face the risk of phlebitis, whether the infusions carry drugs for hospitalized patients or nutrients in the clinical practice of nutritional medicine. Who is likely to develop phlebothrombosis? It has been a very rare occurrence in my personal experience with chelation therapy for cardiovascular disease. This has not been the case for patients with severe chemical sensitivities and disabling chronic fatigue. Patients requiring chelation therapy almost always have easily large veins; those with chronic fatigue sometimes do not. More important than the issue of large accessible veins is the vulnerability of vascular endothelium to trauma associated with intravenous infusions containing large quantities of ascorbic acid and other nutrients. Indeed, spontaneous bruising and vasculitis unassociated with intravenous infusions is a common occurrence in chemical sensitivity and chronic fatigue.

Unfortunately, human canaries are more vulnerable to this than other people. People with environmental sensitivity and indolent autoimmune disorders often have a tendency to easy bruising. The reason for this is simple: Toxins and immune complexes circulate in blood, and the vascular endothelium (the delicate inner lining of the blood vessels) gets the most exposure. When this delicate lining is further irritated with IV nutrient solutions, it leads to blood clotting.

In the list of intravenous nutrient protocols given in this monograph, I include three primer protocols. I designed these protocols with the specific purpose of eliminating or reducing the potential for incompatibility reactions. I have not seen phlebothrombosis with primer I protocol, and I believe the risk of such an event is very small.

Management of Phlebitis

What are the true risks of phlebothrombosis – or phlebitis – that may result from intravenous nutrient therapy? I have not yet encountered a single case of embolism, symptomatic or otherwise, occurring as a complication of such phlebothrombosis. It must be conceded that this indeed may occur.

The phlebitis that I have encountered in my work has been a self-limiting problem. No surgical or medical drug intervention has been necessary. The blood clot has been firmly tethered to the vein wall, and the risk of the clot traveling within the vein has been extremely small. In rare cases, warm packs

and elevation have been deemed necessary. The veins in such cases have nearly always opened again, though sometimes it has taken months.

As undesirable as phlebitis is, it is a small price to pay for the many clinical benefits offered by IV therapies.

A Note about Vitamin C

It is my practice to measure serum ferritin level for every patient requiring intravenous nutrient therapy. If the ferritin level is raised, I eliminate or reduce the amount of ascorbic acid added to the infusion to minimize the risk of oxyradical injury due to Fenton's reaction. It is also my practice to reduce the amount of ascorbic acid used in cases where access to large veins is limited and the patient experiences pain with intravenous infusion in spite of the use of rheologic agents included in the protocols.

Intravenous nutrient therapies are grossly misunderstood. Most practitioners of N²D² medicine still cling to the silly notion that all anyone can achieve with intravenous nutrient therapies is expensive urine. This viewpoint holds that SAD – the standard American diet – provides all the required amounts of vitamins and minerals, and injected nutrients simply pass through the body.

Primer Intravenous Protocols

Many chronically fatigued patients who benefit most from intravenous nutrient therapies initially do not tolerate well the full nutrient doses given in the fatigue protocol that follows. Such patients suffer from a variety of initial symptoms including headache, lightheadedness, lethargy, fatigue and abdominal symptoms. Indeed, full nutrient doses can exaggerate, albeit temporarily, any or all symptoms that the individual patient suffers as a result of multiorgan involvement in the accelerated molecular oxidative process that causes chronic fatigue. This is a point of considerable clinical importance. My staff and I are very careful in briefing IV therapy patients about this temporary phenomenon. Except for patients with devastating, chronic chemical sensitivities of several years duration, I have not seen chronically ill patients who cannot tolerate or who cannot benefit from intravenous nutrient therapies.

In order to limit to a bare minimum the initial unwanted reactions to intravenous nutrient therapies, I recommend the following primer I, II, and III protocols that in my experience have not caused significant problems. These protocols include nutrients that are least likely to cause initial intolerance. In general, it is my practice to prescribe a single IV infusion of primer I, II, and III protocols each for severe to very severe chronic fatigue cases before moving on to the full-strength fatigue protocol. Uncommonly, I have to move more slowly and repeat one or more of the primer protocols depending upon patient

tolerance. Also, in general I prescribe IV infusions twice weekly during the initial period of therapy.