



**Interview of Kent Holtorf, M.D.,
on Treating Chronic Fatigue Syndrome & Fibromyalgia
from ImmuneSupport.com**

ImmuneSupport: In your article on the "Effective treatment of Chronic Fatigue Syndrome and Fibromyalgia", you state that "individuals with these syndromes have measurable hypothalamic, pituitary, immune and coagulation dysfunction. These abnormalities then result in a cascade of further abnormalities, in which stress plays a role." Could you discuss in as much detail as possible how you approach treating the following problems in CFIDS and FM patients:

Dr. Holtorf: Immune dysfunction: If a complete immune panel is done on Chronic Fatigue Syndrome (CFIDS) and Fibromyalgia (FM) patients, almost all have immune dysfunction, which often includes poor natural killer cell function. These cells are very important in killing viruses and bacteria. It is very difficult to eradicate chronic infections when these cells are not functioning well. Antibiotics and antivirals do not work well and are often ineffective if the immune system is not stimulated as well. You are never able to kill all the infectious agents unless the body is able to clean up the residual left by the antibiotic or antiviral. This is very similar to the situation with AIDS patients. There are a number of methods to do this. What I use depends on the infection present, but in general I like Transfer Factor, Pro Boost, Maitake Mushroom, whey protein, astragalus, NK Stim, and beta-glucan combinations with natural and pharmaceutical antivirals or antibiotics. Growth Hormone, thyroid and cortisol are also very good immune enhancers. Yes, I said cortisol - low doses of cortisol for people who have adrenal insufficiency act as an immune enhancer. Large doses are immune suppressors. Your body normally increases cortisol in times of infection. Oxidative therapies, discussed below, can be very powerful. I customize the specific treatment for the patient.

Coagulation problems: This is diagnosed with a specialized laboratory test that includes soluble fibrin monomer, fragment 1 +2, and thrombin/antithrombin complex. Defects are typically treated with heparin to stop the excessive production of soluble fibrin monomers and vascular digestive enzymes to help clean up the fibrin already laid down.

Low thyroid: As discussed earlier, CFIDS and FM patients will often have a number of thyroid abnormalities including a low free T3, a high reverse T3, and a low TSH. These abnormal ratios are not usually discovered using the standard laboratory interpretation of hypothyroidism. When CFIDS and FM patients are treated with thyroid, they are almost always under-dosed because their pituitary dysfunction results in their TSH becoming quickly suppressed, which normally indicates too much thyroid. Because these patients have pituitary dysfunction, one must forget about the TSH and not treat based on this parameter. These patients can also have a thyroid resistance syndrome. This has not been a well-accepted concept by general mainstream medicine and many refuse to believe it exists because the exact mechanism has not been elucidated, but this is a real phenomenon. In fact, in this week's International Journal of Medical Research, a major peer reviewed medical journal, a patient was described that required 10 times the normal dose of thyroid intravenously before her symptoms would resolve. This resistance usually improves as the patient gets better and they subsequently need less thyroid.

Adrenal insufficiency: To diagnose, I typically use symptoms and a combination of blood sugar, free cortisol, and HgA1C%. Again, one must have a high clinical suspicion and not just think in terms of normal and abnormal. These normal levels are determined for healthy individuals, not the chronically ill, so the cortisol levels should be higher with this illness. 24-hour urine and saliva tests can be done, but these can also result in false positive and false negative results. Some doctors who treat these disorders have reported that cortisol is not helpful; this is totally opposite to my experience. I have found this adrenal hormone to be very helpful.

Growth Hormone deficiency: Many CFIDS and FM patients are low in growth hormone. This hormone is produced in the pituitary so it is expected with these illnesses. Treatment can sometimes make a tremendous impact but because of the cost, it is not used on most patients. IGF-1 is the best indication for growth hormone levels.

ImmuneSupport: Once you've determined which problems a CFIDS or FM patient has, do you prescribe both traditional and alternative treatments, or do you focus on a single method at a time?

Dr. Holtorf: One must use both traditional and so-called alternative treatments. In order to treat these diseases adequately, I use many treatments simultaneously. If one treatment were used at a time it would take many years before the patient feels better. I use many treatments at the same time, but I remove a treatment every two weeks when the patient is feeling good for a period of time.

ImmuneSupport: Please tell us a little bit about the Hormone and Longevity Medical Center where you practice.

Dr. Holtorf: I started the Hormone and Longevity Center to concentrate on the treatment of hormone deficiencies with hormonal optimization. Eighty percent of our practice is for patients complaining of fatigue, with CFIDS and FM probably being the biggest part of the practice. This was also the case when I ran the Thyroid Optimization Center a number of years ago.

ImmuneSupport: What are the biggest challenges you face with treating CFIDS and FM patients?

Dr. Holtorf: Although we have good success with CFIDS and FM, these are challenging cases that require doctors to spend significant time with the patient. It cannot be accomplished with seven-minute office visits.

ImmuneSupport: What are the biggest successes you've experienced with treating CFIDS and FM?

Dr. Holtorf: Many of these patients are very sick and have given up. It is so gratifying to get these patients back to having a life. They are just so grateful. Many have been unable to work and/or have been on disability and now [following treatment] are happy, functional and productive.

ImmuneSupport: Are you working on any promising new treatments at this time - either through research or through a trial and error process with your patients?

Dr. Holtorf: I am working on new treatments every day in practice. I have recently found that oxidative therapy can be immensely effective. This involves the administration of intravenous hydrogen peroxide. This is a very safe treatment that is backed by decades of studies. It is popular in Europe for a number of disease states and conditions and has been advocated by the International Oxidative Medicine Association in this country. Hydrogen peroxide is naturally produced in our bodies and has wide ranging effects. It activates the immune system, kills viruses, bacteria, and parasites, increases oxygen delivery to the cells, and activates the mitochondria (energy factory of the cell). This appears to be a perfect treatment for CFIDS and FM patients and I am very excited about the results with this therapy, especially when used in conjunction with the therapies described above. I am going to launch a study involving this combination therapy. I have been asked by companies to conduct drug trials for FDA approval, but I have been declining to do so because, at this time, I do not feel they are worthwhile, even though I am sure they will eventually get approval. The drugs seem to be somewhat effective but generally unspectacular.

ImmuneSupport: What are the most exciting developments you've seen recently in treatment options for CFIDS and FM?

Dr. Holtorf: Recent developments are taking place in a stepwise manner, but I do not believe it will be through the so-called mainstream medicine one-drug cures. I think these are very treatable conditions and advances will only continue to improve treatment. I do believe, however, that [incidences of] CFIDS and FM will significantly increase in number and at some point will be considered an epidemic because they are very poorly treated through the standard health care delivery system.