

A Lecture by Dr. Jeanne Hubbuch, MD.

Editor's Note: This article is important for several reasons. Many doctors who treat patients with the Chronic Fatigue Syndrome/Chronic Fatigue and Immune Dysfunction Syndrome/Myalgic Encephalopathy (CFS/CFIDS/ME) and fibromyalgia (FM) combine traditional medical and holistic/complementary diagnoses and treatments. Patients need to have a sufficient understanding of these approaches in order to determine, along with the physician, which tests and treatments make sense in light of their individual illness.□ As with any traditional medical treatment, the patient should know why a particular holistic treatment is being recommended—i. e., how the treatment is likely to relieve a symptom or an element of the illness itself.

Because traditional medical treatments have been unable to substantially treat CFS/CFIDS/ME and FM, many patients and physicians have turned to alternative/complementary treatments. Many of these treatments have shown some efficacy, including B-12, Coenzyme Q-10, certain herbs, vitamins, and minerals. Some researchers and clinicians have had some success using amino acids, special diets, anti-oxidants, hormonal therapy (with careful monitoring), and other approaches. Some treatments are controversial—including photoluminescence and removal of mercury fillings. Yet, in 2008, some of the world's top CFIDS researchers are exploring the role of vitamins and supplements in supporting energy production at the cellular level. Other researchers are exploring the role of anti-viral therapy.

Dr. Hubbuch's lecture presents a good window into the practice of medical/holistic therapy with CFS/CFIDS/ME and FM.

Dr. Jeanne Hubbuch was warmly introduced by one of her first patients whom she diagnosed with CFIDS/FM twenty years ago. Dr. Hubbuch is a skilled practicing physician from Newton, MA who has an in-depth clinical expertise in the evaluation and treatment of chronic fatigue immune dysfunction syndrome (CFIDS), fibromyalgia (FM) and multiple chemical sensitivities (MCS). She conducts specialized diagnostic testing to identify potential underlying factors, such as infections, deficiencies and toxic agents. Her treatment approach integrates western and complementary medicine. She has been in practice for 25 years and has a wealth of knowledge and interest in CFS/CFIDS/ME, FM, MCS and other chronic illnesses. She combines her compassion and expertise to offer the very best care to her patients. Dr. Hubbuch is Board Certified in both Family Practice and Environmental Medicine.

Dr. Hubbuch emphasized the importance of looking at the whole person. She believes in developing a strong partnership with her patients as they work toward their goal of improving their quality of life. Her patient centered approach focuses not on the disease but the person with the illness. The approach of functional medicine is the improvement of physical, cognitive and emotional functioning of individuals. The goal is restoration or enhancement of health, not just suppression of disease or treatment of symptoms.

CFIDS/ME—Symptoms for CFIDS/ME include: severe bone-weary fatigue; non-restorative and disrupted sleep; flu-like symptoms i.e. sore throat, tender swollen lymph nodes, low grade fever; headache of a new type, pattern or severity; myalgias or aching heavy limbs; post-exertional malaise lasting greater than 24 hours; multi-joint pain without swelling or redness; and cognitive dysfunction. Associated findings include: postural hypotension (low blood pressure) and low blood volume; irritable-bowel syndrome (IBS) (with yeast overgrowth, parasites, bacterial imbalance); hormonal imbalance (with low adrenal, low DHEA, low functional thyroid tests); allergy (intolerances to medicines, foods; inhalants and chemicals that were previously well tolerated).

FM—Diagnostic criteria for fibromyalgia (FM) include: positive tender point exam (11 of 18 positive points for tenderness (soft tissues, muscles, ligaments, tendons); generalized pain (deep, aching, throbbing, shooting, burning, stiffness); fatigue (medium to severe, totally drained, weary arms and legs, feeling heavy like concrete); cognitive impairments (brain fog); and sleep problems where Stage Four sleep (deep sleep) is interrupted by awake-like activity. Other sleep disorders that can be associated with FM are: sleep apnea (temporary, absence of breathing during sleep); myoclonus.(night time jerking of arms and legs); restless leg syndrome; and teeth grinding.

Dr. Hubbuch thinks that CFIDS/ME and FM overlap very closely, and are likely part of the same illness. She feels that multiple chemical sensitivity (MCS) is also on this continuum. Other associated syndromes include: irritable bowel syndrome (alternating constipation and diarrhea, abdominal pain, gas, nausea); chronic headaches—recurrent migraines or tension-type; temporomandibular joint pain (jaw pain); interstitial cystitis (bladder inflammation); vulvitis

(inflammation of vulva); and menstrual irregularities.

MCS can include sensitivities to odors, perfumes, detergents, car exhaust, paints, new rugs and clothes, cigarette smoke, etc, and sensitivities to medications, foods, molds, other inhalants. The onset of MCS can be either high-level toxic exposures (volatile chemicals, solvents, pesticides, smoke, auto exhaust) or prolonged exposure to low-level toxicity over months to years. Symptoms are triggered by these exposures and spread to multiple other, previously tolerated substances. Multiple organ systems are affected triggering a broad range of symptoms, i.e., skin rash, itching, shortness of breath (SOB), cough, myalgias, IBS, neurocognitive symptoms etc. Symptoms recur reproductively from low-level exposure to multiple unrelated chemicals.

Dr. Hubbuch feels that these are multifactoral illnesses with no single cause. Some of the likely causes or initiating events are infections (viral or bacterial) that are either ongoing or cause dysregulation with long-term effects. FM can often begin by trauma, car accidents, falls, etc. MCS could develop first, then patients develop infections, etc. and go on to develop CFIDS/ME and FM symptoms. The conditions are very closely intertwined. Not only can the symptom patterns vary but the onset patterns vary as well. In many, the typical, previously healthy person has a sudden viral syndrome with fever, sore throat etc. that never goes away. For others, the onset is headache, myalgias, respiratory symptoms, GI symptoms (nausea, vomiting, diarrhea) etc. There is often a prolonged illness with no full recovery, as well as recurrent cycles of acute exacerbations. Cognitive functioning continues to decline over the prolonged course of the illness, as does quality of sleep.

These are dominant symptoms that worsen over time. Symptoms also worsen after exertion. In a smaller group of patients there is a gradual onset of fatigue with or without frequent infections or body pain.

Dr. Hubbuch asked the question we have all asked ourselves—*why do we get sick while others who experience the same events do not*

? She feels it is a complex total of many factors including health history, genetics, nutrition, positive and negative factors in life's development, etc. She likened the body to a kaleidoscope that is constantly shifting and changing. She cited research by Dr. Leo Galland in *The Four Pillars of Healing*

. He has identified three factors that move individuals from health to illness: mediators that produce symptoms causing damage to the body, i.e., neurohormones, cytokines, neuropeptides, free radicals etc.; triggers that exacerbate previous illness i.e. infections, drugs, toxins, overuse syndrome etc.; and antecedents that are risk factors predisposing individuals to illness, i.e. prior history, genetics, age, nutrition etc. Physicians need to look at intervening at these multiple levels to move individuals back to an improved health status. Dr. Hubbuch wants to treat any irregularities with the goal of rebalancing homeostasis.

Since there is no defining diagnostic test, you need to look at a variety of tests including standard blood chemistry: i.e., CBC, electrolytes. She looks for insulin resistance or dysregulation now (resulting from recent research on syndrome X.) This is a condition found in overweight individuals where they are producing too much insulin. This sets in motion pro-inflammatory hormones that can increase your risk of heart disease. Weight gain is common in patients with CFS/CFIDS/FM, along with reduced exercise tolerance. This leaves patients at a higher risk for insulin resistance."

Common organisms that she tests for that may contribute to illnesses are:

- Epstein-Barr virus (EBV)
- Cytomegalovirus (CMV)
- *Chlamydia pneumonia*
- *Mycoplasma*
- HHV-6
- tick-borne diseases: Lyme, Ehrlichia, Babesia

Postural Hypotension—She also looks for postural hypotension or neurally mediated hypotension, as well as low blood volume. An inexpensive office test for postural hypotension is to check blood pressure (BP) and pulse lying down and standing, every 3-5 minutes. If the BP drops more than 20 mm, then there is a problem. A more detailed diagnostic test for NMH is the tilt-table test.

Hyper-coagulation—She tests for hyper-coagulation syndrome. The lab test is the immune system activation of coagulation or ISAC panel. She finds that it is useful a blood panel. It looks at abnormal coagulation patterns i.e. excess fibrinogen, soluble fibrin monomer excess, platelet activation markers etc. In other words, your blood is clotting too much. As a result there is increased blood viscosity (thickening) and the fibrin strands can coat viruses and bacteria to protect them, making them survive longer. The goal is to thin the blood and, reduce clotting time to normal which is done by treating with low-dose heparin (see treatment section).

Hormone Tests

Thyroid—Testing Thyroid is very important. She does not rely on the standard TSH (thyroid stimulating hormone) test. It is best to look at the free T4 and free T3 thyroid levels, as well as selenium, which is a co-factor in making T-3. If selenium is low, it can interfere with thyroid production. Hypothyroidism (low thyroid), particularly borderline hypothyroidism, is often found

in patients with CFIDS/FM. Symptoms can include low body temperature, coldness, dry itchy skin, sluggishness, constipation, puffiness, loss of outer third of the eyebrow. Dr. Hubbuch found that treatment with T4 and/or T3 has been very helpful.

Other hormones—Look for abnormal levels of estrogen, progesterone and testosterone and treat any dysregulation. Adrenal hormones can be measured in several ways. ACTH stimulation test measures adrenal reserve (the ability to increase cortisone under stressful conditions). What may prove more useful is a 24 hr. urine test for hormones that measures thyroid, adrenal and growth hormones (GH). There is also a saliva test that looks at cortisone levels four times in a day. This will show natural variations within the day. To date there has not been consistent benefit with cortisone treatment. The correct dose is still being explored. GH may be worth looking at when nothing else works, although the treatment is very costly (\$10,000/yr). Precursors can be tried which are less expensive.

Heavy Metal Evaluation

Dr. Hubbuch screens for lead, cadmium, mercury, arsenic, tin and aluminum which are present in the environment, i.e., incinerators, lead paint and in some foods, i.e. mercury in fish.

The first step is hair test screening. If further testing is required, she recommends challenge or chelation (binding) urine testing i.e. DMSA (2,3-Dimercaptosuccinic acid or by the trade name Succimer). Garlic and chlorella are some over the counter products you can use. Heavy metals are stored in your body and cause long term dysfunction of enzymes and antioxidants, and therefore need to be cleared from your system. Silver amalgam dental fillings are another source of contamination for some, especially if you grind your teeth. These fillings were used for a long period of time and contain 50% mercury.

Nutritional Deficiencies

Dr. Hubbuch does functional testing for vitamins including homocysteine (a functional measurement of B6, B12 and folic acid) and methylmalonic acid (a functional measurement of B12). She recommends functional blood testing (intracellular micronutrient analyses) over just measuring serum blood levels. She uses Spectracell Labs (Houston TX) for many of her functional tests.

Amino acids are building blocks of protein and may need to be replaced. Essential fatty acids (omega 3, omega 6) are measured to determine fatty acid deficits that can be replaced through diet. Good sources of omega 3 are fish, flaxseed oil and walnuts. Omega 6 is found in cooking oils. Dr. Hubbuch looks for mineral deficiencies, especially zinc and magnesium. She looks at red blood cells, hair tests, functional testing, i.e., Metamatrix urine test for organic acids as co-factors).

Antioxidants balance free radicals in your body. She tests for the following antioxidants: glutathione, Co-enzyme Q10, Vitamin C, Vitamin E, Selenium and Carotene. She does a liver

detoxification test which is a functional test that measures free radicals and antioxidants. This test determines how well your detoxification system is working.

Tests for gastrointestinal (GI) problems are done to rule out parasites, yeast and bacterial imbalance. Tests include: a comprehensive digestive stool test (CDSA) for parasites, a urine test for organic acids (metabolic markers for yeast and bacteria); and an intestinal permeability test for leaky gut.

In general Dr. Hubbuch recommends a low sugar diet high in fresh, whole foods, lots of fruit and vegetables, whole grain complex carbohydrates, 40-60 grams of protein/day and use of nonhydrogenated oils. Hydrogenated oils are frequently found in bakery goods, i.e., breads, muffins, crackers, cookies—to extend shelf life. She strongly recommends limiting caffeine and alcohol. Caffeine challenges the adrenal glands and raises blood sugar as well. Alcohol is particularly a problem if you have yeast infections.

Alkaline Diet—Dr. Hubbuch also recommends an alkaline diet based on the research of Dr. Russell Jaffe: The goal is to maintain a good acid/base balance in your body. Keep your urine pH between 6.5-7 when you get up. (pH is the measure of acidity or alkalinity of a substance. Water has a pH of 7.) You can use urine test strips at home to monitor this. High alkaline foods include: yams, lentils greens, pumpkin seeds, oats, quinoa, wild rice, miso and seaweed. You can also add lemon lime juice or apple cider vinegar to your drinking water. For high acidity, you can take baking soda, buffered vitamin C, calcium and magnesium buffered. If you're feeling particularly toxic, you can take a baking soda and epsom salt bath. You will absorb the magnesium and bicarbonate as well as detoxify your body through your skin. Soak for 20 minutes, rub your skin, then rinse off. You can also substitute alka seltzer for baking soda for oral detoxification.

Allergies are frequently found in people with chronic illness. Immune dysregulation can cause a higher presence of a certain type of T helper cell, type 2 (TH-2), which are antibody related (vs. T helper cell, type 1 (TH-1), which fight infection). People with CFIDS, FM and MCS may have dominant TH-2 cells that make antibodies to everything, food, air, chemicals etc, triggering allergic reactions. The goal of treatment is to shift TH-2 dominance to TH-1. Balance is the key.

Food Allergy: The easiest way to test for food allergies is to totally remove the suspected food from your diet for 7-10 days. This is called an elimination and challenge diet. The most common food allergens are: wheat, dairy, soy, citrus, corn, coffee, sugar, chocolate and egg. The challenge part is to reintroduce one of the eliminated foods in its pure form, i.e., cracked wheat vs. wheat bread, once a day and watch for any reactions. Allergies trigger a very broad array of

symptoms, including body pain in patients with FM, so you need to be observant.

Allergy blood tests are useful but they are not 100% accurate. They have both false positives and false negatives. They look for delayed allergic reactions, which are IgG mediated, versus immediate allergic reactions which are IgE mediated, i.e., throat closing from a peanut allergy. Delayed allergic reactions are more common in CFIDS, FM and MCS. She also measures immune complexes that can trigger reactions.

Gluten is often a culprit even if you are not directly allergic to it. Wheat, rye, oats and barley are high gluten foods. Tests for gluten include antigliadin and antireticulin. If you have lots of GI problems, you should consider eliminating gluten for one month to see if you have any improvement.

Dairy is a frequent allergen that triggers lots of mucus production. If you have respiratory problems, asthma etc., you should evaluate this. Some patients have a reaction to dairy due to lactose intolerance. They may be able to take a lactase enzyme with dairy products to reduce or eliminate symptoms.

Insulin Resistance—If the patient is overweight, she looks for insulin resistance. This is a condition where individuals are producing too much insulin. This sets in motion pro-inflammatory hormones that can increase your risk of heart disease. Weight gain is common in patients with CFIDS/FM, along with reduced exercise tolerance. This leaves them at a higher risk for insulin resistance.

Glucose—Dr. Hubbuch looks at fasting glucose tests. If the tests are positive, she recommends restricting dietary carbohydrates. Additionally, she treats them with some of the following: lipoic acid (an antioxidant), vanadium (a trace mineral), chromium (helps with blood sugar regulation as well), DHEA (dehydroepiandrosterone) adrenal hormone, and conjugated linoleic acid (CLA) which is made from safflower oil. CLA helps with weight loss (it affects the way fats are metabolized).

Hypoglycemia—Watch for hypoglycemia (low blood sugar) that is triggered by eating too much sugar and caffeine stimulating the body to make too much insulin, then dropping the blood sugar too low. This in turn triggers carbohydrate cravings, which starts the cycle all over again. This is the wrong approach. The goal is to maintain a more even blood sugar. This can be done by eating more complex carbohydrates, balanced with proteins and fats. This diet doesn't stimulate a hyper-insulin response.

Yeast is another common problem. As mentioned, the overuse of antibiotics can increase yeast and bacteria in the intestine, which upsets the body's homeostasis. Dietary yeast can trigger severe reactions. Testing for yeast can be done on stool, blood and urine. If any tests are positive, you can move to a yeast-free diet. Foods to avoid include: alcohol (especially beer and wine), cheese (hard), yeasted breads, sugar, vinegar, mushrooms, all fermented mold-based foods, and simple carbohydrates.

Fatty Acids—Omega 3 fatty acid is found in fish, pumpkin, walnut and flax (1 tbs. flax oil = 8

gm omega 3 and 2gm of omega 6). She recommends 6gm/day of omega 3. Omega 6 is found in all cooking oils. She recommends 10+ gm/day.

Dietary fats—Saturated fats are found in: meat, dairy, coconut oil etc. Limit these to 10% of your diet. Polyunsaturated fats are found in: vegetable oil, nut oil, etc. These are the healthier oils and sources of omega 6. Avoid all hydrogenated oils as they are damaging to your health.

Dr. Hubbuch emphasized the importance of vitamins, minerals and nutrients for an optimal level of functioning. The current recommended daily allowance (RDA listed on your vitamin bottle) for vitamins is very low and does not even meet the needs of most healthy people.

She recommends a comprehensive evaluation of the individual's biochemistry to determine deficiencies, which are more common in chronic illness. She also noted new research that offers promise on glyconutrients - special sugars that the body makes that are essential for cell-to-cell communication and immune support. The eight essential sugars, known as saccharides, include: fructose, galactose, glucose, mannose, acetylglucosamine, acetylgalactosamine, acetylneuraminic acid and xylose.

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Sleep is the most important problem to address. Improving sleep hygiene is essential (discussed in prior lectures). Non-prescription meds recommended by Dr. Hubbuch include: valerian, 5HTP (hydroxy-tryptophan) and melatonin. Prescription drugs include: elavil or other tricyclic meds; trazadone (desyrel), similar to tricyclics; flexeril, a muscle relaxant; neurontin, used for pain as well; and klonopin, also used for pain, brain fog and anxiety. Ambien and sonata are two newer short-term sleep meds.

Pain Control—The body centered therapies that Dr. Hubbuch recommends include: chiropractic; osteopathic; acupuncture; physical therapy; massage; and myofascial pain release.

Stretching and slowly graded exercise with weights are important for conditioning and decreasing pain.

Essential fatty acids, omega 3 and omega 6, reduce inflammation (i.e. flax, fish oil).

Removing allergic foods can be very helpful, as well as improving liver detoxification.

Magnesium relaxes muscles and is helpful for body aches and stiffness, along with malic acid.

Non-prescription meds include ibuprofen, and non-steroidal anti-inflammatory drugs.

Prescription pain medicines include muscle relaxants skelaxin (better for day use, less grogginess) and flexeril (nighttime use); neurontin (gabapentin) (originally an anti-seizure drug now used for pain); baclofen, for muscle and bladder spasms; elavil, a tricyclic also used for sleep; dextromethophan (found in cough meds) can extend the effectiveness of narcotics; NMDA antagonist (N-methyl-D-aspartate), i.e., ketamine; and narcotics when needed.

Fatigue—Dr. Hubbuch emphasized the importance of learning to listen to your body, pacing yourself and setting aside regular rest periods. Non-prescription meds that she recommends include: co-enzyme Q-10, an enzyme that helps with mitochondrial abnormalities (at least 200 mg.); and NADH (nicotinamide adenine dinucleotide), another co-enzyme that helps restore mitochondrial energy production. In addition, she recommends B vitamins, especially B12 methyl cobalamin 5000mg. This is the newest form of B12 and is preferred over other types.

Prescription drugs include stimulant medications, i.e., ritalin, dexadrine, cylert, which work in some patients, but may affect the adrenal gland. Antidepressant medications can help increase energy as well as help with sleep, depression of chronic illnesses and anxiety.

Hormone Treatments for Fatigue—Dr. Hubbuch has found that treating thyroid dysregulation is very helpful. Treatment can include: T4 and/ or T3, and selenium since low selenium can interfere with thyroid production. She corrects estrogen, progesterone and testosterone

deficiencies. Adrenal hormone treatments have not had much success to date, and some may have serious side effects. Possible treatments may include: cortef (adrenal steroid hormone cortisol, hydrocortisone); vitamin B5 (panothenic acid) 500mg 3x/day; Siberian ginseng and ashwaganda, an Ayurvedic herb, both act as an adaptogen (rebalancing the adrenals); licorice root; DHEA (dehydroepiandrosterone) used to replace low levels produced by adrenal hormones; and vitamin C.

[Ed. note: in using hormone therapy for the thyroid or adrenals, many physicians, for safety reasons, are insistent on monitoring hormone levels in the blood to avoid toxicity or abnormal side-effects.]

Infections—Dr. Hubbuch uses high doses of oral vitamins, minerals, and herbs including echinacea, vitamin C and garlic. She also uses intravenous (IV) vitamins minerals and the antioxidant glutathione. For specific infections, she uses antibiotics in protocols designed for that infection i.e. chlamydia pneumonia; mycoplasma. She has not had a lot of success with antiviral meds, i.e., acyclovir, valtrex, famvir, lysine. She uses gamma globulin injections for patients who have frequent infections as a non-specific immune enhancer.

Older treatments include: kutapressin, a purified liver extract (injection only); and mistletoe (iscador iscucin) which is used in Europe to increase natural killer (NK) cells (injection only).

Photoluminescence—She is encouraged with the results of photo oxidation ultraviolet light treatment. This is an old treatment that was used prior to the development of antibiotics. The technician removes 4 oz. of blood through an IV tube that runs through the machine, and then returns it to the patient's blood stream. The ultraviolet light treatment increases free radicals, which kill viruses, bacteria, parasites and yeast. The treatment shifts the oxygen-hemoglobin curve so more oxygen can get into tissues, and restore antioxidants including glutathione. { *Ed. note: this is a controversial procedure.* }

Hyper-Coagulation—If hyper-coagulation is positive, Dr. Hubbuch treats patients with low dose heparin. If there is an improvement, you can switch to the oral blood thinner, coumadin. There is also a non-prescription proteolytic enzyme, wobenzyme, that can break down fibrin deposits.

Abnormal Gut—If tests indicate abnormal gut function, Dr. Hubbuch has a four-stage approach to treatment. First remove bacteria, yeast and parasites (there are lots of different ways to do this), then replace hydrochloric acid and digestive enzymes. Then she reinoculates the gut with good bacteria, lactobacillus, using probiotics (supplements containing friendly bacteria) and inulin (a polysaccharide from the Jerusalem artichoke). Inulin helps reverse or shift the immune system's T-helper cells from TH-2 to TH-1 cells. The final stage is repair with L-glutamine (an amino acid), essential fatty acids and fish (short-chain) peptides.

Postural Hypotension—Treatments for postural hypotension include: increasing fluid intake (1 gallon/day) and adding more salt to your diet. You can also use pedialyte. Prescription medications include: florinef, midodrine, and beta blockers. Florinef (fludrocortisone) is a corticosteroid that acts on the kidneys to retain fluid. Midodrine (proamitine) increases cardiovascular tone and blood pressure. Beta Blockers obstruct certain nerve impulses.

Licorice paste is a non-prescription medication that is thought to stimulate the production of

natural steroids and raises blood pressure.

Depression /Anxiety—Non-prescription medication to treat depression includes: St. John's Wort; amino acids like tyrosine, DL-phenylalanine (DLPA), and 5-hydroxytryptophan (5HTP); S-Adenosylmethionine (SAME) (a supplement synthesized from the amino acid methionine); and B vitamins. Prescription meds include the anti-depressant medications, and anti-anxiety medications.

Allergies /Multiple Chemical Sensitivities—The overall goal is to reduce your total allergy and chemical load. That means reducing your exposure to as many allergens and chemicals as possible. You need to understand the connections between all your allergies, i.e., pollens, food etc. The best prevention strategy is still avoidance of allergens and chemicals. You can reduce your exposure in your immediate environment by replacing personal care products, home cleaning products, etc. Be very cautious when renovating your home. Building products can be a major source of chemical exposure. Dr. Hubbuch found allergy desensitization treatments to be helpful.

First, celebrate what you can do. Try to focus on the positives. Learn to laugh off things that go wrong. Humor is a great antidote. Learn to pace yourself. Build up a personal support network. Find a support group in your area. Empower yourself by educating yourself about your illness. Build a working partnership with your doctor.

Possible New Approaches

Dr. Richie Shoemaker feels that these illnesses are triggered by neurotoxins. He has developed a simple internet-based test called the visual contrast sensitivity test (VCS).

Because the optic nerve is very sensitive to the effects of neurotoxins, he uses the VCS to detect the presence of a neurotoxin. If the test is positive, he recommends treatment with cholestyramine, an older powdered medication that was used to treat high cholesterol. He contends that the powder binds to and excretes neurotoxins, reducing symptoms. You take the medication 4x/da for 2-3 weeks. The test is available at his website Chronicneurotoxin.com.

Another approach from Dr. Shoemaker is to treat with actos (pioglitazone), a medication currently used to treat diabetes. The medication blocks tumor necrosis factor (TNF). By blocking

TNF, you may reduce the severity of symptoms. Dr. Hubbuch has just started her first patient on this. She'll keep us posted on her progress. One caution, the drug is designed to lower blood sugar, so this needs to be closely monitored.

(Q) Do you have to do all these tests?

(A) You can triage your need for certain tests based on your health history if necessary. Unfortunately, many of these tests are not covered by insurance.

(Q) Do you see any consistency in test results?

(A) Unfortunately she sees no consistency, the patients are very heterogeneous (varied).

(Q) What about the use of hormone replacement if you are on heparin?

(A) Dr. Hubbuch sees no contraindications.

(Q) What about getting the flu shot?

(A) Dr. Hubbuch had two answers. If you have had a flu shot with little to no reaction, you can continue to do so. She has also seen some patients who have relapsed after their first flu shot, so she does not recommend it to patients who have not had it yet.

(Q) Even though I have lots of allergic reactions to pollens, food and drugs, my allergy tests are negative. Why?

(A) There are many different mechanisms of intolerance. It may not be antibody related. It may be related to immune complexes/ other. Avoid the substances whenever possible. The goal of any intervention is to switch from TH-2 to TH-1. This can be done with acupuncture, NAET desensitization (chiropractic) and other methods.[*It is highly doubtful the methods suggested will switch the immune system from TH-2 to TH-1.*]

(Q) If a patient has a yeast/ bacterial overgrowth of the small intestine, what course of action would you take?

(A) You can rebalance the intestines with probiotics i.e. lactobacillus bifidus, lactobacillus GG to return the good bacteria. You can use glutamine (supports repairs of leaky gut), fish peptides and inulin. Antifungal approaches include: grapefruit seed extract, oregano oil and nystatin (medication for treatment of yeast).

(Q) Can any of the following reduce or eliminate bad intestinal bugs without harming good bugs?

(Q) Hot or cold liquids?

(A) She does not recommend it.

(Q) Deliberate diarrhea?

(A) She does not recommend it.

(Q) No sugar or starch?

(A) She does recommend this, it will decrease symptoms because you are not feeding the yeast.

(Q) *Fasting?*

(A) Fasting is difficult for people who are ill. She does not recommend it. If you want to detoxify, try a simple rice, vegetable, olive oil diet, or you can use a prepared rice-based drink i.e. ultraclear.

(Q) *Do you recommend diflucan for chronic yeast overgrowth?*

(A) Yes, it is a very useful medication for chronic systemic yeast problems, and it has few side-effects.

(Q) *Should I have my silver fillings removed?*

(A) If you have high mercury toxicity and all other approaches have failed then yes. It is very expensive and can trigger more complications and there is no guarantee it will work.

(Q) *Do you know of any credible negative connection between root canals and FM?*

(A) We are learning more and more about the interconnection of your teeth and your overall health through the biological dentistry movement. Your teeth sit on key meridian points in your body. Root canals are a potential source of chronic infection. Even though the main roots are removed, there are miles of roots that remain. The biggest problem is there are no good alternatives to root canals at this point.

(Q) *I eat a lot of salmon and tuna, do I need to be checked for mercury? If so, how often?*

(A) You should be checked about once a year. To keep your levels low, you can eat enough minerals to rebalance yourself, i.e., magnesium, calcium, zinc, garlic, etc.

(Q) *Are there any growth hormone (GH) precursors that really work?*

(A) Not many are effective. She does not do much work with GH but other M.D.s who do have recommended Trans- D tropin available through College Pharmacy.

(Q) *Can you have absorption problems with supplements in pill form?*

(A) You need to check the stool for evidence of undigested pills and malabsorption. If so, then you may need to go to a liquid form.

(Q) *What about the use of IV lidocaine for pain?*

(A) She has not found it to be very helpful.

(Q) *Is gamma globulin safe to use since it is a blood product?*

(A) It's safe.

(Q) *I've heard of a test for the pituitary. Is it useful?*

(A) You're likely referring to the ACTH stimulation test which checks cortisone reserves. What may prove more useful is a 24 hr. urine test for hormones that measures thyroid, adrenal and

GH. There is also a saliva test that looks at levels four times in a day. This will show natural diurnal variations within the day.

(Q) *Can lead poisoning as a child trigger symptoms as an adult?*

(A) Yes, you should be retested for lead. The acceptable levels have lowered in the last 20 years, so there may still be some residual lead.

(Q) *Is there a link between CFIDS, depression and bipolar disorder?*

(A) There is no link with bipolar disorder, and she does not see much primary depression. Some of her patients have a reactive depression secondary to a chronic illness.

(Q) *How effective are epsom salts in raising magnesium?*

(A) Magnesium is well absorbed through the skin.

(Q) *I use the hot tub daily absorbing bromine, and the swimming pool absorbing chlorine. Is this unhealthy?*

(A) If you are able to tolerate it, then it is not a problem. If you have MCS, you may not tolerate it. An alternative is to look for pools and hot tubs sanitized with ozone or ultra violet light.

(Q) *What has been your experience with the use of guaifenesin for the treatment of FM?*

(A) I have not had a lot of success with this medication (found in many cough treatments). She has followed Dr. St. Amand's protocol.

(Q) *Are your patients recovering?*

(A) Many are improving, and some are recovering. Generally it is a slow road to improvement and recovery, and there are no simple answers. My goal is to improve my patient's quality of life to whatever degree is possible.

Editor's Note: Some of these treatments are new and have not been tested extensively, so you should consult with your health care provider before you start using them. Keep in mind that many alternative treatments are not covered by insurance, so costs are a factor you need to consider.