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Supplement to
The Art of Getting Well
Lyme Disease: Arthritis by Infection

Sources are given in references.

Authors of contributions/quotations are alphabetically arranged; major author, if any, is underlined.

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AKA The Arthritis Trust of America®

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Discovery of Lyme Disease

Rheumatoid Disease, consisting of perhaps a 100 differently named medical phenomena, but all related to collagen tissue damage, seems to be a response to many different factors: bacterial, viral, protozoal, yeast/fungal, poor nutrition, allergy, aging (free radicals), and so on.

While it is not unusual for a person to respond to a particular, single treatment, most often what seems to be an incorrigible health problem must be tackled from many different sources at once, say, nutritional, medical, Candidiasis treatment, allergy treatment, chelation therapy, and so on, depending upon the person and the problem.

The unlucky invasion of *Borrelia burgdorferi*, the spiral-shaped microbe injected by at least one species of tick, *Ixodes scapularis*, seems to present the unwitting victim with arthritic symptoms that also may require more than one approach for its solution. Thankfully, if diagnosed early enough, antibiotics can easily wipe out the invading population, and bring about swift remission. The antibiotics, of course, should be heavily accompanied with *Lactobacillus acididophilus*¹, so that while treating the Lyme Disease, we do not also unwittingly bring about a fungal infection of Candidiasis. (See "Candidiasis: Scourge of Arthritics," <http://www.arthritis-trust.org>.)

There are about 1,200 cases of Lyme Disease reported across the United States each year; there were 1,282 cases reported in 1993⁴.

The disease remains concentrated along the coastal plain of the Northeast and mid-Atlantic region, in the upper Midwest, and along the Pacific coast, although the disease has been reported in 32 states.

In a *Science News* report, researchers at the University of Connecticut Health Center in Farmington and the Yale-New Haven Hospital examined 70 children diagnosed with Lyme Arthritis Disease and found that only 53% actually harbored the Lyme-causing bacterium *Borrelia burgdorferi*. The remaining 47% had been misdiagnosed.⁴

There is some hysteria regarding the incidence of this disease, possibly due to extensive adverse publicity. One thousand two hundred and eighty-two cases out of perhaps several hundred thousand with tick bites is not exactly a national emergency, although for a

percentage of those afflicted, the disease can be rather significant and even catastrophic.

Lyme disease has the following symptoms: begins with reddened area that doesn't itch, resulting from tick bite, but expands over time, measuring several inches across; clearing of bite area begins in center resembling a bull's-eye; flu-like symptoms: chills, fever, fatigue, joint and muscle pain; may develop a rash which disappears in a few days; may have tingling and numbness; non-symmetrical joint problems; other symptoms may also occur; sometimes sensitivity to light, stiff neck, headache, sleepiness, mood changes and memory loss; swelling and aching joints for months or years at a time; and vague, migrating musculature pains.

The characteristics of Lyme Disease were first laid out in 1975 when two mothers were told that their children had Juvenile Rheumatoid Arthritis. The name "Juvenile" does not distinguish its clinical pattern from that of "Adult" Rheumatoid Arthritis, but merely tells the parent that this horrible, crippling disease occurred in their child, a fact that most parents already know. What is new is the diagnoses of "Rheumatoid Arthritis."

These two mothers soon learned that many other children and adults in their geographical region were afflicted with the same symptoms, and since Rheumatoid Arthritis does not seem to cluster in a regional geography (with some exceptions), Dr. Stephen E. Malawista of Yale University, among others, began to look for a source of this apparently new disease. Dr. Malawista discovered that many of his patients suffered from a range of symptoms among which might be those that resembled Rheumatoid Arthritis. (See *Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis*, <http://www.arthritis-trust.org>.)

The cause of Lyme Disease was determined to be a microbe transmitted by a tick, in this first instance, from the species *Ixodes capularis*. Since this tick was common in the grasses and woods near Lyme, Connecticut, the cluster of symptoms obtained the name "Lyme Disease."

As Dr. Willy Burgdorfer, who worked for Rocky Mountain Laboratories in Hamilton, MT, identified the damaging microbe, the bacteria was named *Borrelia burgdorferi*, which is a spiral-shaped bacterium similar in shape to the spirochete, *Treponema pallidum*, which causes syphilis.

Since this initial set of discoveries, it's clear that similar diseases have existed in Australia, Africa, Europe and Asia. It also appears in every one of the states in the United States, but seems to be particularly common in northern California, Minnesota and the northeast.

Infection by *Borrelia burgdorferi* occurs chiefly in the spring, summer or early fall, because of the life cycle of the *Ixodes scapularis* tick.

Three Stages of *Borrelia burgdorferi*

There are three stages to the life cycle of the tick, and at each stage they have a favorite host, although they will attach themselves to a range of animals, including the human species.

The larva from *Ixodes scapularis* emerges in the summer from eggs deposited in the spring, and attaches itself to a small vertebrate such as a white-footed mouse, where it imbibes its first meal. If this mouse is infected with *Borrelia burgdorferi* spirochetes, the larva feeding on the mouse's blood will also become infected.

Later, the larva molts into a nymph, and during the spring and summer (usually mid-May through July) this nymph takes a second meal. If the larva was infected, it may very well pass *Borrelia burgdorferi* onto its second host. This nymph is now about the size of a small seed, say, a poppy seed, and is responsible for most human infections.

The nymph molts again, and by October is the size of a larger seed, like an apple's. Again this tick feeds, at least by winter or

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spring, and they also mate to produce eggs that begin the cycle all over again. Usually ticks do their mating on white-tailed deer, which is why they are referred to as a "deer tick".

In some regions of the United States, between 15 and 30 percent of the *Ixodes scapularis* nymph and adult ticks are infected with *Borrelia burgdorferi* -- some 50 percent of adult ticks are infected. The adult ticks are more likely to infect humans because they have had more opportunity, throughout their life-cycle, to do so.

About 1 to 3 percent of adults who are bitten by the infected tick contract Lyme disease, meaning that a high percentage of those infected are able to master the infection.

The tick attaches itself to the skin of its host, where it takes its meal of blood. At this time *Borrelia burgdorferi* begins to multiply in the gut of the tick, whence it crosses into the tick's circulation system, migrating to the salivary glands and passing with the tick's saliva through the host's skin.

A tick must be attached to its host for 36 to 48 hours before an infectious dose of *Borrelia burgdorferi* is transmitted. This is fortunate, because most folks who are bitten by a tick will find it prior to the infectious event.

Lyme Disease Symptoms

Those infected by the bacteria *Borrelia burgdorferi* usually have a set of characteristic symptoms:

Stage I Symptoms

1. About 60% will notice a round rash called an erythema chronicum migrans (ECM), as doctors like to have a nice, neat name for everything they observe.

2. Three days to a month later there will be a redness at or near the site of the tick bite.

3. The reddened area does not itch or hurt, but it will expand over time until it may measure several inches across.

4. There is a clearing that begins in the center, as the rash enlarges, resembling a bull-eye. Some may acquire the rash, but fail to see these characteristics because of the bite's location.

5. The rash may disappear within weeks or even days.

6. Days or weeks later, a variety of other early symptoms affecting many areas of the body appears, and these symptoms are thought to be from the spread of the spirochete to many different tissues through the blood stream. The symptoms will include flulike symptoms, such as chills, fever, fatigue, joint and muscle pains, and loss of appetite. (See "The Herxheimer Effect," <http://www.arthritis-trust.org>.)

Stage II Symptoms

Weeks to months later, about 10% of those afflicted will experience transient heart dysfunction. There will be varying degrees of heart blockage. Neurologic abnormalities include headaches, profound fatigue, meningitis, cranial nerve problems (neuropathies), including fascial palsies, and sensory and motor nerve problems.

Cardiac problems occur with 5 to 10 percent of those infected, if they have been untreated. Usually this condition is not noticed by the infected person, but can be detected by a physician. The heart irregularities persist for but a week to 10 days and probably will not require the use of a pacemaker.

Early symptoms may also include mild musculoskeletal disturbances, where patients complain of vague, migrating pain without swelling in muscles, tendons or joints. The jaw, the temporomandibular joint, may be affected. These symptoms, too, will decrease in weeks to months.

However, in about a half a year after the initial infection, 50% of those infected (without treatment) will suffer episodes of obvious arthritis, including the symptoms of swelling and discomfort in one or more joints, but often the knee.

Stage III Symptoms

Ten percent of those who reach the "arthritic" point will go on to suffer chronic Lyme Arthritis. These patients will find joints swelling for months at a time, or certain joints will become enlarged and achy for a year or more.

In these latter stages, joints, the central nervous system and the skin may be involved. Arthritis can develop from a few weeks to several years after Stage I. Sixty percent suffer at least one episode of arthritis if untreated. Usually the joint arthritis is but one-sided, and migration of the joint pain may prefer the larger joints, especially the knees.

Attacks may last for weeks or months, although they may also become less frequent over time and eventually disappear, leaving about 10% with damaged joints.

Sometimes neurological problems also appear, in about 20 percent of untreated patients, including Bell's palsy. Bell's palsy is one of our listed "Rheumatoid Diseases," a collagen tissue disease, and so there must be more than one causation for that affliction².

Other neurological afflictions include meningitis (sensitivity to light, stiff neck, headache), encephalitis (sleepiness, mood changes, memory loss), and radiculoneuropathy, where the roots of nerves that stem from the spinal cord to the periphery of some level of the body becomes irritated. These regions may be painful, tingle, or even go numb.

In traditional Rheumatoid Arthritis, a joint affected on one side of the body will also have a matching joint affected on the other side of the body. This is not true for Lyme Arthritis where only one joint may be affected on one side of the body.

Although the skin, heart, joints and nervous system are usually targeted, as the *Borrelia burgdorferi* bacteria can invade any system in the body, every organ or system in the body can also produce its own variation of symptoms. This ability to invade all human systems, too, is a similarity to the syphilis spirochete.

Traditional and Untraditional Treatments

Thankfully, if diagnosed early enough, antibiotics can easily wipe out the invading population, and bring about swift remission. (The antibiotics, of course, should be heavily accompanied with *Lactobacillus acididophilus*¹ so that while treating the Lyme Disease, we do not also unwittingly bring about a fungal infection of candidiasis.) (See "Candidiasis: Scourge of Arthritics," <http://www.arthritis-trust.org>.)

The key to solving Lyme Arthritis is early diagnoses and antibiotic treatment. Early diagnoses can be difficult, especially when the characteristic rash is not present. Since flulike symptoms can arise from many different sources, as described in Dr. Paul Pybus' *The Herxheimer Effect*³, it becomes most difficult for a physician to make an early diagnoses. The patient's history, especially their recent exposure to woods, ticks, and bites, and especially noting the characteristic bulls-eye lesions on the skin, all are most important for early diagnosis.

Although a definitive test for *Borrelia burgdorferi* bacteria is possible, the test is presently a low-yield procedure. A direct examination of body fluids and tissues is not recommended because there will be so few organisms found. There are no blood tests that can make an early diagnoses of Lyme Arthritis within the time length required for an early diagnosis, although surely someone, somewhere is working on or has developed such an early test, probably based on DNA of the microorganism. The study of body serums, serology, using indirect immunofluorescent assay or enzyme-linked immunoabsorbant assay has a slow antibody response and is positive in but 50% of Stage I infections, and should antibiotics be used, the test is often aborted.

Since Lyme Arthritis is potentially disabling, extreme vigilance must be taken by those who traverse woods and grasses, but overall, it may not cause serious problems for more than 10 percent of those

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Many who think they have Lyme Arthritis actually suffer from other forms of disease states, but among those who are found among the 10 percent seriously affected, there seems to be no good solution to the problem, because, after the early stage of the disease, antibiotics seem to be ineffective.

The primary problems with traditional treatments consists of the following: (1) Inability to diagnose the disease early without specific noting of the bulls-eye lesions, or having at hand an accurate, clear, case history. This delay affects treatment response by use of antibiotics, and often also causes over-extended usage of antibiotics; (2) Over-extended usage of antibiotics increases overgrowth of organisms-of-opportunity in the intestinal tract, such as *Candida albicans*, which condition also creates additional disease states, including some that mimic various arthritides forms, and also increases food allergies over time; (3) Many treated cases linger with pain, increasing systemic damage, and lessened vigor over many years, often ending up damaged organs and joints. (See "Candidiasis: Scourge of Arthritics," <http://www.arthritistrust.org>.)

There is hope, however.

Alternative Treatments

Anti-Amoebic (Anti-Microbial) Treatment

Gus J. Prosch, M.D., Jr. of Birmingham, Alabama suggests a trial of the Rheumatoid Arthritis or Rheumatoid Disease treatment protocol as recommended by The Arthritis Trust of America/The Rheumatoid Disease Foundation: "I've seen Lyme Arthritis Disease clear up after using a course of anti-microorganism drugs as recommended by Professor Roger Wyburn-Mason for Rheumatoid Diseases. (See "The Roger Wyburn-Mason, M.D., Ph.D. Treatment for Rheumatoid Disease" <http://www.arthritistrust.org>.)

"Although Lyme Arthritis Disease, and other diseases such as Gout, Carpal Tunnel Syndrome, and Tendinitis are not supposed to be the same kind of diseases as Rheumatoid Arthritis, I've seen them all respond one time or another to the same treatment we use for Rheumatoid Arthritis."¹⁹ (See "Gouty Arthritis," "Soft tissue Arthritis," and "Arthritis: Osteoarthritis and Rheumatoid Disease Including Rheumatoid Arthritis," <http://www.arthritistrust.org>.)

In the case of Lyme Arthritis Disease, Dr. Prosch will give metronidazole (or one of the other 5-nitroimidazoles described) in heavier doses, for a longer period of time than recommended for Rheumatoid Disease.

Artificial Fever and Herbs

Agatha Thrash, M.D. and Calvin Thrash, M.D. write that "About one-third of patients with chronic infectious arthritis derive substantial benefits from fever treatments, one-third derive only moderate benefits, and one-third little or no help.

"In gonococcal arthritis, swelling and pain is often astonishingly helped. Patients suffering from [Osteoarthritis] receive temporary benefit, and the fever treatments may be used along with general arthritis treatment of diet and physical conditioning."²⁴ (See *Home Remedies*, <http://www.arthritistrust.org>.)

The Case of John Woodworth

Agatha M. Thrash, M.D., Uchee Pines Institute, Seale, Alabama was visited by a 54 year old Caucasian with Lyme Arthritis Disease. John had typical symptoms of pain in the joints, neurologic symptoms and specific rash beginning with a small, raised, red area and spreading concentrically outward with fading in the mid-portion.

Dr. Thrash administered a series of 15 fever treatments in which the mouth temperature was brought up to 103⁰ Fahrenheit as many times as possible during the 15 treatments, each day. John took five treatments, then skipped 2 days and repeated this schedule 3 times.

Dr. Thrash writes: "Once in a great while a person with Lyme Disease does not clear completely with the first series of 15 treatments and must take a second series. This was the case with John Woodworth. We waited 3 weeks between series to give the body a good chance to reset the immune system. Fever enhances the effec-

tiveness of the immune system, but the body adapts to the fever and the response begins to weaken after about 5 days. For this reason we skip 2 days each week and rest 1 to 3 weeks between series."

John also was given golden seal and echinacea, the first being anti-bacterial, and the second being a boost to the immune system. "The way to make it is by bringing a quart of water to a gentle simmer, adding 1 tablespoon of golden seal root powder and 1 heaping tablespoon of echinacea (chopped whole plant). It should be simmered for 20 to 25 minutes, cooled, strained, and drunk throughout the day. Make it up fresh every day.

"On the first day in chronic cases, and for 5 to 10 days during the acute phase, the patient should take 2 quarts of the tea daily. The patient should also take Nutri-biotic™ (grapefruit seed extract) obtainable from any health food store. Put 6 to 15 drops in a quart of water or tea and drink 2 quarts a day."

Dr. Thrash says that "We have had several typical cases of Lyme Disease, complete with the tick bite and rash, which have been treated with a series of artificial fever treatments. None of them, including John Woodworth, has had further illness, as long as 2 years follow-up later."¹⁸

Homeopathic Remedy

According to Stephen Tobin, D.V.M.

Stephen Tobin, D.V.M.,³¹ is a veterinarian in a Lyme Arthritis Disease infested region. He's treated many cases of Lyme Disease in dogs, cats and horses.

After trying a number of homeopathic remedies, he settled on Ledum (Genus Epidemicus) in a 200 or 1M potency, three times a day for three days. Dr. Tobin says, "Every animal treated this way has shown immediate improvement, whether they were only recently infected or have had the disease for years, treated or not with antibiotics. A number of pet owners, on seeing how well it cured their companions, took it themselves, with equally good results.

"As a preventative, I use the *Borrelia burgdorferi* nosode 60X, giving one dose daily for one week, then one dose per week for one month, then one dose every six months, the same way I administer all the nosodes I give in place of vaccinations.

"I have had only one failure in almost two hundred animals so treated. This is more effective than the vaccine for Lyme Disease used in dogs, which often has the effect of producing symptoms of Lyme Disease, including lameness, swollen joints, lethargy, inappetence (lack of appetite), kidney failure, and cruciate degeneration (cross-shaped as in the cruciate ligaments of the knee)

"I have seen no side effects from the nosode itself."

According to Dr. Catherine Russell

Although rare in Mexico, Dr. Catherine Russell,³⁰ Guadalajara, Mexico, successfully treats Lyme Arthritis Disease just as she would any other arthritis. She uses proteolytic enzymes, niacinamide 500 mg 3 X daily, and homeopathic symptomatic medicine according to individual symptoms and modalities. Sometimes she also uses herbs, especially stinging nettle which she picks and prepares herself, especially when a lot of uric acid is involved. (See "Homeopathy for Arthritics" and *Healing Dimensions of Herbal Medicine*, <http://www.arthritistrust.org>.)

Venus Fly Trap Carnivora Treatment

Carnivora is an extract of the Venus Fly Trap plant (*Dionaea muscipula*) that was developed by the German oncologist (cancer specialist) Helmut Keller, M.D.

According to medical reporter Morton Walker, D.P.M.,²² "Since 1981, over 2,000 patients have been treated with Carnivora. Among them has been President Ronald Reagan who received the substance postoperatively following his operation for malignant polyps of the colon. The President took Carnivora drops for their healing and preventive powers against cancer recurrence."

"Actor Yul Brynner also received dosages of Carnivora in injections and/or Carnivora drops." Yul Brynner's lung tumor's were rapidly diminishing in size until he foolishly followed the recommendation of a New York City oncologist and failed to keep up with the remedy."

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"Carnivora has a proven 82 to 87% remission rate for most types of carcinoma when the patient's immune system has not been compromised by conventional, allopathic chemotherapy or radiation therapy."²²

As Carnivora is a relatively new product, no one knows how many different organisms it can inhibit, or kill. In addition to its immune stimulating properties, the Carnivora extract "has been used successfully for the treatment of chronic diseases including most forms of cancer, neurodermitis, ulcerative colitis, Crohn's disease, multiple sclerosis, all types of herpes infections, primary chronic polyarthritis, and almost any immune deficiency state," and AIDS.

After it's use, Harvey Bigelsen, M.D. was so impressed with the reduction of pleomorphic organisms in a patient's blood that he ordered a supply of Carinvora for his own use.²² Pleomorphic organisms are microorganisms that change form and function depending upon their surrounding environmental conditions. (See *Cell Wall Deficient Forms*, <http://www.arthritis-trust.org>.)

Dorothea M. Linley, M.D.

Dorothea M. Linley, M.D. says, "In August 1986, I came down with a flu-like illness: pains in muscles, back, headache, fatigue and even my hair was painful. Fever and migrating arthritis followed by cardiac fibrillation which was controlled by oral magnesium. A blood test for Lyme disease was positive. . . .

"It settled in my knees, the left swelling so severely I needed crutches. I took 1 gram of tetracycline daily for 3 weeks and then 2 grams daily for three more weeks. Then my stomach rebelled and it was stopped.

"I was left with 50% reduced motion in both knees. Three months later I learned that the North (negative, south seeking) magnet would reduce swelling and pain. I applied a North pole magnet to both knees for 30 minutes twice a day⁵. In one week my knee flexion was doubled. In 6 months flexion was almost normal except for something that didn't feel right in the middle of the joint. (See *Biomagnetic Handbook*, <http://www.arthritis-trust.org>.)

"Two months later I experimented with germanium sesquioxide⁶. On a dose of 900 mg daily the right knee returned to normal in 3 days and after reducing the dose to 300 mg daily, the left knee took about 2 months to become normal. . . . (See "Germanium," <http://www.arthritis-trust.org>.)

"I was 5 years without any symptoms.

"In May 1992 my left knee started swelling and a blood test was positive for Lyme. Whether this was a new case or a return of the first attack I do not know. What I did know was that I had no desire to take antibiotics again. I had just finished treatment for Candidiasis⁷.

"In mid-July I learned about Carnivora [*Dionaea muscipula*, Venus Fly Trap plant extract] from Morton Walker's article in the *Townsend Letter [for Doctors]*⁸. I learned that Carnivora would kill bacteria, yeast, parasites and viruses without harming beneficial intestinal bacteria.

"I believe the Carnivora has killed the Lyme bacteria as well as Candida overgrowth. I lost 10 pounds, my skin is younger looking, my bowels are functioning normally for the first time in my life, my fingernails are hard and growing well, and my digestion is improved, needing fewer digestive aids.

"I hope my story will help those many patients suffering from chronic illness which may be due to Lyme. I was fortunate in that I did not take antibiotics until after a positive blood test. Those who treat symptoms clinically typical of Lyme before developing a positive blood test will never test positive and thus obscure the diagnosis. There are many people out there in this situation."

Dorothea M. Linley, M.D. can be reached at 220 Banks Rd., Easton, Connecticut 06612.

Neurokinesiological Testing and

Herbal Remedies of Louis Marx, M.D.

Louis Marx, M.D. Recommended Treatment

Louis J. Marx, M.D.¹¹ combines neurokinesiology as a research and diagnostic tool with herbal programs.

A simple explanation of kinesiology given by Dr. Marx is that "if you touch a blocked acupuncture point while testing a muscle, that muscle will test weak. . . . Kinesiology is a technique for testing the integrity of the energy supply to an organ, as evidenced by a specific muscle. It uses the concept of organ-muscle linkage. . . . Any muscle can be used.

"Neurokinesiology differs from applied and other forms of kinesiology by not relying on the organ-muscle linkage. . . . It tests directly through the nervous system. . . . Dr. Calvin Alldredge has developed reflex points for the various known and unknown infections, hormonal system, nutritional status and toxic substance. By testing through the nervous system we are getting responses from the body's innate intelligence."

In Dr. Marx's *Neurokinesiological Testing and Herbal Remedies*, writing on herbal remedies (tinctures or capsules), he says, "Most programs last about three weeks. Usually, the patient experiences an improvement from a program within a day or two. However, during the third week after beginning a program, the patient may feel a decline in well-being and may develop new symptoms. It is very important to understand what is happening to avoid discouragement and loss of confidence in the treatment.

Here are more books by Louis J. Marx, M.D., *Healing Dimensions of Herbal Medicine*, *Neurokinesiological Testing and Herbal Remedies*; 3418 Loma Vista Road, Suite 1-A, Ventura, CA 93003; also see <http://www.arthritis-trust.org>.

"What really happens is that the herbals have just about resolved those problems being treated, and the immune system no longer has to concern itself with those specific disorders. Therefore, the immune system starts attacking another group of infections, etc. This can happen a number of times with some patients. However, each group of new programs brings more energy and well-being than the prior programs. Expect this and explain it to the patient so they will not get discouraged.

"Sometimes a patient may present a specific complaint and testing identifies a specific factor as causing that complaint. However, after taking the program for that problem, the symptom remains. If you retest, you will identify another basis for the symptom which was not identified in your first examination. It is like the problem has layers to it, and as one layer is uncovered, a deeper one surfaces. Occasionally, you may need to treat two or three factors before there is a final resolution of the complaint. Usually the response is rapid enough and dramatic enough to leave little doubt about the benefit of the herbal programs."

Dr. Marx, using neurokinesiological testing and herbal remedies, has developed a combination of herbal recommendations for almost every disease condition. These include, but are not limited to, viruses (assorted, intestinal, liver, herpes, wart, immune, life force), parasites, bacteria, Mycoplasma, rickettsia, yeast/fungi, onco genes (involved in cancer), and even the will to live.

Dr. Marx says, "Once you learn the system, you can apply it to any remedy. You can test your foods, supplements, drugs, etc.

"The drops can be put in water or juice, or taken directly into the mouth. The amount of alcohol ingested is negligible, and many reformed alcoholics tolerate the tincture well without inducing a craving for alcohol.

"The capsules are best taken after meals. The capsules and tinctures do not need to be taken at the same times of day. All the tinctures or extracts can be taken together. If there are six bottles of liquids to be taken, they all can be put in a small amount of juice. Shake and drink followed by some extra juice to chase down the taste. It is actually better to squeeze the dropper top and squirt out one dropper full. It is more accurate than counting out the drops. That's

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment. because some of the liquids are thicker, therefore, have larger drops.

"If the extracts or tinctures are too thick, just add a few drops of water to the bottles.

"Most herbal programs contain three bottles -- one bottle of cut dried herbs in capsules. There are 70 caps to each bottle. The other two are one half ounce bottles of liquid extracts or tinctures. On each of these bottles are letters AO, RVO, VO, JRVO just before the program name. These letters stand for the extractants used in making the formula. A stands for alcohol, O stands for oil, R stands for rice water, V stands for vinegar, and J stands for fruit juice. T stands for tincture, and so (T)-(AO) stands for tincture of oil in an alcohol base. SPIRO- (L) would stand for the Lyme Spirochete.

Louis J. Marx, M.D. recommends that herbal remedies be ordered from Monastery of Herbs, PO Box 3123, Granada Hills, CA 91394; (800) 352-4372; (818) 360-4871. There are other good sources, but best one check through a health professional, as many herbs are either not what they are supposed to represent, or have been degraded throughout its delivery and storage cycle.

In the case of Lyme Arthritis Disease, Dr. Marx recommends the use of:

(T)-(AO) SPIRO-(L) @ 30 drops/day for 1/2 Fld. Oz
(T)-(RVO) SPIRO-(L) @ 30 drops/day for 1/2 Fld. Oz
Herbal Blend SPIRO-(L) @ 4 Capsules/day for 50 Caps.

The Case of Pearl Bennette Atkin, R.N., M.A., C.S.

Where Carnivora extract helped one person, it seemed to become a burden for another. Pearl Atkin, RN, MA, CS, Briarcliff Manor, New York, fought against Lyme disease, to win. Healer Atkin¹⁰ wrote to *Townsend Letter for Doctors* for advice in November 1992, saying:

"In June of 1984 I attended a professional conference in the wooded town of Armonk, New York. Within a couple of weeks I had flu-like symptoms -- aches and pains all over my body, especially a headachy feeling each afternoon, and discomfort in my coccyx area. After the summer cold the aches and pains subsided, but I continued to experience a 'hypoglycemia-type' of late afternoon problem, which I took care of with a fruit and nut snack, and sometimes with an ounce or two of vodka.

"But even after that, I was still left with an aching coccyx, and at that point I decided my mattress had to be traded for a softer, more luxurious type -- such as deep innerspring, or foamy and waterbed types. I had always thought that a waterbed was decadent -- until that summer. When I first tried out a waterbed, I was able to get comfortable on it in a second -- and my coccyx felt good in any position!

"Then, after about six weeks of these unpleasant symptoms, as I was finally sleeping a little more comfortably at night, . . . an official from the conference that I had attended 8 weeks before called to ask how I felt, and asked if I had [any of about 40 symptoms] -- and I'd experienced many of them. I had recently turned 50, and felt that [age] was the reason -- now I knew differently -- I had Lyme [Arthritis] Disease.

"I was given the name of a Westchester Lyme [Arthritis Disease] specialist. I called him, then went for a consultation, and told him about my symptoms. Blood was drawn, and I was put on 7-10 days of tetracycline 240 mg 4 times a day. I was informed that, although I had not had the classic bull's-eye -- I had had a rashy welt initially on my forehead that I thought was poison ivy -- two weeks later it had spread down to my neck and chin areas -- I would know it was 'Lyme' if, after taking each tetracycline capsule I would have an exacerbation of the headachy, flu-like symptoms. That's exactly what happened. I continued taking the capsules until the exacerbation experience stopped -- and then for a few more days -- which was a total treatment of about 10-12 days. Yet the blood work was negative.

"During and for some time after the treatment period, I continued to be troubled, frequently, by the peculiar headaches, though I had hardly ever had headaches before. And these felt different from any I had experienced before. As they were miraculously cured,

almost instantaneously, by a shot of vodka, it was my treatment of choice whenever they returned.

"That was the summer of 1984. Very gradually, over many months, the headaches became less frequent and less intense. But two years later, in 1986, my headachy symptoms flared again, and I again went on tetracycline 500 mg 4 times a day for 7-10 days. It did the trick this second time also.

"Two years later, in 1988, there was a third episode. I had the headachy feeling again, and the doctor gave me a choice of 7 days in the hospital with an intravenous (IV) drip of penicillin (which was the treatment of choice at that moment in time) -- or I could try 7-10 days of tetracycline 500 mg again.

"I opted for the oral treatment, and took more vodka every afternoon with my snack parties!

"The headache receded to a low level that was tolerable and I went on about my life. [During these episodes, the first two measurements for Lyme antibodies (titers) were negative -- but I understand that false negatives are common; then a third sample was taken, but that one was lost.]

"But now I'm right in the middle of it again -- my fourth serious episode. This past summer I went to Eastern Europe on a genealogical tour and when I returned home I had a protracted case of 'jet lag.' One day I noticed a rashy welt in my pubic/groin area, and the next day I had 103⁰ F temperature. I called my gynecologist -- but he was on vacation. His 'covering' doctor called back, and we ran through the 'could be's' -- and came up with my fourth recurrence of Lyme Disease.

"He prescribed 500 mg of tetracycline 4 times a day again for 7-10 days. The temperature and rash were gone immediately! When I called my gynecologist the next week, he said I should continue on the tetracycline for 1 month -- that was the protocol for Lyme this year.

"By the second week, however, the tetracycline was giving me nausea, queasiness, stomach and abdominal discomfort, and I was having headaches around the clock. So I called a doctor friend (an internist), and he changed me to Amoxicillin (straight penicillin 500 mg 3 times a day), for another 2 weeks.

"That treatment gave me back my appetite, and took the worst of the headaches away. But what else is it doing to my poor system? I've been taking *Lactibacillus acidophilus*¹ to counteract the killing of the good intestinal microorganisms.

". . . I've paid no attention to Lyme Disease therapies the last few years, because I've had other things to deal with personally and professionally that seemed more important than a 'hypoglycemic headache' but now my spotlight [is] on Lyme Disease, . . ."

On December 1993, Pearl Atkin¹² described the great help she'd gotten, particularly from Lous Marx, M.D. of California. She wrote:

"I want to let you know how well I've been since you published my last 'Letter [in *Townsend Letter for Doctors and Patients*] . . . regarding my plea for help with my fourth Lyme Disease attack. Each time I have had a Lyme infection I have been treated with massive doses of antibiotics, but have nevertheless been left with a pattern of recurrent headaches identical to those experienced during the initial acute Lyme episodes. This last time the headaches were so severe that they were disorienting as well as disabling. For several months I could not remember what it was like to have a clear-thinking and pain-free head.

"One of your subscribers, Dr. Dorothea Linley from Connecticut, contacted me with information about treatment that had been successful for her own chronic Lyme infection. She had been working with a nutritionist who advised Carnivora²² (Venus Fly Trap extract) as part of a program that also included many vitamin supplements and glandulars. After I began this program my headaches cleared up about 70%. But each time I opened [and began using] a new bottle of Carnivora I had a recurrence of devastating flu-like symptoms³ -- high fever, and head and full body aches for 3 days. After three rounds of this (approximately 3 months) I stopped those treatments, as I decided to accept the 70% remission and live with it!

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment.

"At this time a physician -- Dr. Louis Marx¹¹ -- sent a copy of his herbal book to me, having earmarked the page on 'Spirochetes; Lyme Disease.' Reading this book, I was impressed with his work of the last 10 years on 'designer herbals' (with Dr. Clifford Alldridge), and called him to discuss my situation. He encouraged me to order the Spirochete-Lyme program -- but told me to expect that it might not give me 100% relief, and also that I might need to do several more herbal programs, as one layer of disorder after another required attending to. . . .

"Within three days my headachy feeling that I have lived with for years was gone -- and my head was clear as a bell! It was unbelievable, and extremely pleasurable."

Pearl Bennette Atkin, RN, MA, CS can be reached at 85 Aspinwall Road, PO Box 950, Briarcliff Manor, New York 10510, telephone (914) 941-8926.

Nutritional and Immune Support The Case of Sarah Statesmyer

Sarah Statesmyer, age 16, came to the office of Robin Ellen Leder, M.D.,²⁹ in Bronx, New York, complaining of severe fatigue and episodes of debilitating joint pain, especially in her knees. Low energy made it extremely difficult for Sarah to do her work at a law firm on her bad days. She felt like she could barely walk. Her symptoms, she reported, had been ongoing since childhood.

Sarah's parents thought her problem stemmed from a tick bite years earlier, but a blood test was only suggestive of Lyme Arthritis Disease, and was not conclusive, probably because of the time that had passed since Sarah's first exposure to the *Borrellia burgdorfi* organism. However, because of the described symptoms and probable history of Lyme Arthritis disease, this condition was considered to be the most likely cause of Sarah's problem.

Dr. Leder discussed traditional, possibly long-term, antibiotic therapy with Sarah, and also the importance of supporting the immune system in chronically symptomatic Lyme Arthritis Disease patients.

Sarah and her family chose to begin treatment using the nutritional approach offered by Dr. Leder.

To help design a diet that would benefit Sarah, Dr. Leder began by having Sarah take a six hour glucose tolerance test and a special blood test for food allergies. She was found to be quite hypoglycemic (tendency to low blood sugar), and also to have sensitivities to a number of foods.

Sarah's diet was changed and she was required to eat a minimum of five to six times per day, and every meal or snack was to include some form of protein. All foods that Sarah was allergic or sensitive to, according to her blood test, were eliminated from her diet.

Dr. Leder, according to her custom, also asked Sarah to eliminate other common foods that have a history of being allergenic, even though they were not on Sarah's list, and, in addition, to cut out any other foods that had any remote history suggestive of allergy.

A broad spectrum of nutritional supplements and plenty of water completed Sarah's program.

"With the help of an exceptionally supportive family, Sarah's symptoms literally disappeared, her energy was restored to a level normal for a healthy young woman, and, during several months of follow-up, no further flare-ups of her joint pain occurred."

Universal Oral Vaccination

When former Iowa Congressman Berkley Bedell¹³ testified before the U.S. Senate Health Appropriations Subcommittee Chaired by Senator Tom Harkin, also of Iowa, on June 24, 1993, he gave witness to a powerful and obviously safe method of solving Lyme Arthritis Disease. (See "Universal Oral Vaccine," <http://www.arthritistrust.org>.)

He described a procedure whereby the killed bacteria, *Borrelia burgdorferi*, was injected above a cow's udder, above the base of the teat, (where the antigen or allergen is sure to reach the cistern) prior

to the birth of her calf. Colostrum -- the cow's first milk after the calf is born -- is processed into whey -- the liquid left after milk has been coagulated by the aid of a coagulating enzyme called rennet.

Congress Bedell also gave witness to the effects of an over-powerful, suppressive governmental organization that would prevent people from trying every 1-1/2 hours for a few weeks the whey of this milk to learn if their Lyme Arthritis Disease will disappear. He reports that the company that cured him "dares not sell such a medicine, because of FDA regulations."²¹

Later the same farmer that cured Congressman Bedell of his Lyme Arthritis Disease prepared a homeopathic remedy which, Bedell reports, had 80-90% success in treating patients for whom conventional treatments had not been effective.

When specific personalities in the U.S. Department of Agriculture were shown in court to have falsified data regarding this patent -- apparently as part of governmental suppression (although according to one source there may have been personality conflicts also) -- it became only the second patent in U.S. history to receive by vote of U.S. Congress an additional 16 year lifetime protection.

On April 2, 1968, a patent number 3,376,198,²³ "Method of Producing Antibodies in Milk," was granted to William E. Petersen, St. Paul, MN and Berry Campbell, Monrovia, California, assigned to Collins Products, Inc., Waukon, Iowa. Other patents for additional discoveries have since been granted to Mary E. Collins and Robert A. Collins (Patent No. 4,402,938; September 6, 1983; Gregory B. Wilson and Gary V. Paddock (March 28, 1989); Robert A. Collins and Philip F. Weighner (Patent No. 4,843,065; June 27, 1989); Robert Collins K (Patent No. 5,102,669; April 7, 1992)

The original work on development of the cows'-milk vaccine was performed at the University of Minnesota, School of Biochemistry under the direction of the patent assignees. (Porter: *Biological Abstracts* 1953, p. 951, par. 10, 185). In August, 1951, Dr. Porter, then "working on his doctoral thesis, suggested the possibility of manufacturing antibodies in the cow's udder by infusion of antigen into the udder of a lactating cow." (Patent No. 3,376,198)

A spokesman for a group that prefers not to be identified, says that the protective element "seems to be a system of peptides that is produced by the cow. . . . Basic research beginning in the late sixties was directed to identify the active products (biological and chemical) in the whey product. This has proven very difficult and especially because the activity is not an antibody per se, but appears to be the action of a low molecular weight material. [Complement, the end product of killing microorganisms was discovered; 5,000 or less Daltons in molecular weight. See "Immune System Protection from Foreign Invaders" and "Universal Oral Vaccine," <http://www.arthritistrust.org>.]

"Several important activities can be found in the product that is produced by infusion of specific antigens into the udder (above the udder into the cistern) of a cow after collecting the colostrum and milk for the final product production. These are being researched.

Many people have used the product, and it seems not to matter whether the cow's colostrum is used, made into whey, the cow's milk is used, or a homeopathic remedy is prepared, whether or not pasteurized, whether or not lypholized, or pasteurized and lypholized -- all are effective, although transfer factor, an additional protective substance, as described in one patent seems to be of higher yield in the colostrum.

Reminiscent of what has become the routine human use of dimethylsulfoxide (DMSO) or antibiotics restricted by law to veterinarians and those practicing husbandry, marked "Not For Human Use," some dairy farmers purchase colostrum products for their animals' disease protection, but use the products on themselves with success.

Those with access to a cow can purchase standardized antigens (killed) or allergens from biological supply sources which can be inoculated through the cow's udder or into the base of the udder

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(into the cistern) at the proper time before calving. A variety or blend of organisms or substances -- pollen, cat, dog, or cow hair if one is allergic, or specific antigens against a given disease condition -- will result in a milk product -- colostrum -- that will cure and protect from an equally large and varied number of pathogenic organisms or allergens, respectively.

In homeopathic remedies produced by Beaumont Bio-Med, Waukon, Iowa, conditions aided are Rheumatism, Rheumatoid Arthritis, coughing, respiratory, sore throat, skin conditions, acne blemishes, upset stomach, cold and flu, diarrhea and impetigo.

(See "Universal Oral Vaccine" and "Homeopathy for for Arthritics," <http://www.arthritistrust.org>.)

A few homeopathic remedies based on the described principles can be obtained from Beaumont Bio-Med, PO Box 6, Waukon, Iowa 52171; (800) 332-2249.

As a general principle, this method will vaccinate safely against any allergen or antigen -- any substances which when introduced into the body create antibodies such as allergenic pollens, house dust, animal hairs, or micro-organism proteins.

According to Patent Number 3,376,198, antigenic protections can be developed against "bacteria, viruses, proteins, animal tissue, plant tissue, spermatozoa, rickettsia, metazoan parasites, mycotic molds, fungi, pollens, dust and similar substances. . . . exemplary antigens include: bacterial -- *Salmonella pullorum*, *Salmonella typhi*, *Salmonella paratyphi*, *Staphylococcus aureus*, a *Streptococcus agalactiae*, g *Streptococcus agalactiae*, *Staphylococcus albus*, *Staphylococcus pyogenes*, *E. Coli* pneumococci, streptococci, and the like; viral -- Influenza type A, fowl pox, turkey pox, herpes simplex and the like; protein -- egg albumin and the like; tissue -- blood and sperm."

Protected, according to this and a later patent, were mice, cows, goats, chickens and pigs.

For allergy prevention, one can use a mixture of hair (cats, dogs, cattle), making a vaccine. (Many milk-producing farmers become allergic to cow's hair.) Other allergens, such as pollens, can also be introduced, such that many other allergies can be beneficially affected.

It's also good for chickenpox, cold sores, genital herpes, *Cryptocides sporidium*, and for anti-inflammatory conditions, as it is heavy with complement and anti-complement (C3B), substances that assist in the destruction of invasive organisms.

In work supported by the National Institutes of Health and by Philip Morris Cos.,²⁷ "A modified version of a protein extracted from whey blocked the AIDS virus from infecting cells in the test tube," according to Dr. Robert Neurath, head of the laboratory of Biochemical Virology at the Lindsley F. Kimball Research Institute of the New York Blood Center.

"Scientists modified a whey protein called beta-lactoglobulin to produce a substance called B69, which they discovered latched onto a protein structure called CD4 on the surface of cells." This prevented AIDS virus from using CDS as an entryway into the cells.

Dr. Jeffrey Laurence, an AIDS researcher at Cornell Medical College in New York, cautioned that HIV can infect some cells without using the CD4 gateway.

According to a source,²³ "One North Dakota support group uses this substance for multiple sclerosis with beneficial results."

In a 1984 study reported in *Medical Microbiology and Immunology*³² IgA-rich cow colostrum containing anti-measles lactoglobulin resistant proteases was orally administered to patients with MS. Measles-positive antibody colostrum was orally administered every morning to 15 patients with multiple sclerosis at a daily dosage of 100 ml for 30 days. Similarly, measles-negative antibody control colostrum (< 8) was orally administered to 5 patients. Of 7 anti-

measles colostrum recipients, 5 patients improved and 2 remained unchanged. Of 5 negative (< 8) recipients, 2 patients remained unchanged and 3 worsened. These findings suggested the efficacy of orally administered anti-measles colostrum in improving the condition of MS patients (P < 0.05).

The Case of Dorthy Johnson

Dorothy Johnson,²⁸ 49 years-of-age, was diagnosed at the Mayo Clinic with multiple sclerosis, a slowly progressive Central Nervous System disease characterized by patches of demyelinated nerve tissue of the brain and spinal cord. Demyelination is the loss of insulative protective tissues that surround nerve tissue.

Dorothy suffered from varied and multiple neurological symptoms and signs, such as shakiness, numbness in legs, difficulty in climbing stairs, tingling in hands and feet, cramping of legs, and other symptoms.

Although multiple sclerosis may go into remission and then recur, often with greater severity, over a period of four years Dorothy became progressively worse, until she met Herb Saunders, a farmer who had been treating people for various conditions by the use of specially prepared colostrum from a cow.

Dorothy took 4 tablespoons of colostrum a day for two years, and gradually improved, until all of her symptoms disappeared.

When some symptoms did reappear after a period of time without the colostrum, her husband obtained three more bottles of specially prepared colostrum, and again the symptoms disappeared. She has continued without symptoms for several years.

The Case of Judith Toliver

Dorothy's experience was repeated by that of Judith Toliver,²⁸ 26 years-of-age, who was wheel-chair bound. Her blood was injected into the cistern of a cow, and the prepared colostrum given to her in the same manner as that described for Dorothy. After one year of treatment, she was able to walk upstairs with a cane.

Other Diseases

Early work using the described principle for Rheumatoid Arthritis involved staphylococcus and streptococcus killed organisms injected as antigens into the cow's cistern, the successful results thus strongly supporting the infectious nature of Rheumatoid Arthritis. As many forms of Rheumatoid Diseases and related diseases seem to have an infectious and/or allergenic component, such as Ankylosing Spondylitis, candidiasis, Crohn's disease, Fibrositis, Fibromyalgia, food allergies, rhinitis, and so on, this form of protection may be all-inclusive, inexpensive, and all-important.

According to one spokesperson,²³ "The homeopathic remedy derived from this process has been found useful for various forms of arthritis."

One hundred gallons of milk is taken from an inoculated cow, casein and fat separated by ultra-centrifuge, and pasteurized. It is then lyophilized -- frozen -- that is the water is taken out under cold temperature. The resulting powder can then be used sub-lingually, or made into homeopathic remedies, or any other reasonable means for introducing it into the human or animal body.

The suppression of safe, workable treatments continues: The Minnesota diary farmer, Herb Saunders, 66, who cured Congressman Bedell, was prosecuted in St. James, Minnesota by the state prosecuting attorney for practicing medicine without a license. Herb was selling bovine colostrum ("first milk") as a potential cure for cancer. "Saunders would sell each patient a cow for \$2,500, but keep the cow on his farm. He would inject a sample of each patient's blood into the cow's udder [cistern], and then sell the colostrum to the cow's owner for \$35 a bottle. Saunders told an undercover state agent who posed as a cancer patient that he would 'cough out' his cancer within months if he would take colostrum, [and] refrain from chemotherapy.

"After two weeks of [court] trial -- the longest this small community had ever seen -- the result was a hung jury. The 6-person jury voted 5-1 to convict, but the last holdout, a part-time social studies

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment. teacher, apparently couldn't decide whether Saunders was practicing medicine without a license or offering an alternative type of care that is not medical practice."²⁶

Berkley Bedell provided \$21,000 for Saunders' defense.

"The Watonwan County attorney's office stated that it planned to retry Saunders." Herb Saunders was indeed tried a second time, resulting in a hung jury more pronounced than the first time.²⁶

To make these kinds of obviously safe treatments available to all, avoiding great costs and suffering under ineffective traditional treatments, each person is advised to write to his/her U.S. Senators and Representatives in support of freedom-of-choice-in-medicine legislation, and also to support similar bills at each state level.

Possible Traditional Vaccines

There has been considerable interest in developing a vaccine against *Borrelia burgdorferi*, and so far the research looks quite promising, but there are years of work ahead before such vaccines are to be declared both safe and effective. Rather than inoculate humans with appropriate vaccines, possibly mice in nature can be vaccinated, thus breaking the Lyme Disease cycle⁹.

To develop any kind of effective vaccine against Lyme Disease, however applied, will surely provide knowledge on how to protect folks from the invasions of the syphilis spirochete.

According to reports in the *Journal of Longevity Research*, Dr. Henry Jay Heimlich, who developed the Heimlich maneuver, and who also pioneered successful organ replacement using part of a patient's stomach to construct an esophagus, is investigating (in China) the use of a curable malaria organism as a cure for AIDS and possibly also Lyme disease. Malaria is said to stimulate production of TNC (Tumor Necrosis Factor), Interleukin-1, and other regulators of cellular immunity which has been associated with Lyme Disease¹⁴.

Royal Raymond Rife Technology

Superb technology was developed by Royal Raymond Rife under sponsorship of Timken ball-bearing funding. According to 1930's reports by physicians associated with the University of Southern California, cancer and other diseases were being cured.

After the FDA persecuted and destroyed Rife's work, his technology languished until James E. Bare, D.C. retraced Rife's frequency generating path, using modern technology. Dr. Bare and others have now produced results that seem to match, and in some respects exceed, Rife's work. As they cannot build or sell these devices without incurring the ire of FDA, they have made circuit diagrams, video tapes and internet data available to those who would like to build the devices themselves.

According to internet information, using this newly developed Rife instrument, frequencies 432, 484, 610, 790, and 864 will kill off the bacteria that causes Lyme disease.

Information can be obtained from James E. Bare, D.C. (505) 268-4272; fax (505) 268-4064; Email: rifetech@rt66.co.m

At least one researcher, John Myers, D.C., has learned that Rife's hard-won frequency information can easily be obtained via use of kinesiology, thus determining appropriate frequency and wave form for killing microorganisms, erasing internal scar tissue, reducing tumors, and clearing up arterial plaques. Although the editor knows of a number of patients -- including those suffering from Lyme arthritis disease -- who have been treated and cured by Dr. Myers, no proper documentation exists to pass along to others at this time.

Also see "Universal Oral Vaccine -- With Patents," <http://www.arthritis-trust.org>.

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The following excellent article came from <http://www.mercola.com>, a site that is highly recommended for the latest in alternative/complementary views.

Lyme Disease: The Unknown Epidemic

by D. J. Fletcher and Tom Klaber

Millions of people who are diagnosed with multiple sclerosis, fibromyalgia, Alzheimer's, chronic fatigue syndrome and other degenerative diseases could have Lyme Disease causing or contributing to their condition.

Forget just about everything you think you know about Lyme disease.

It is not a rare disease, it is epidemic. It is not just tick-borne; it can also be transmitted by other insects, including fleas, mosquitoes and mites — and by human-to-human contact.

Neither is Lyme usually indicated by a bull's-eye rash; this is found in only a minority of cases. And, except when it is diagnosed at a very early stage, Lyme is rarely cured by a simple course of antibiotics. Finally, Lyme is not just a disease that makes you "tired and achy" — it can utterly destroy a person's life and ultimately be fatal.

Lyme disease, in fact, might be the most insidious -- and least understood -- infectious disease of our day. "If it weren't for AIDS," says Nick Harris, Ph.D., President of IgeneX, Inc., a research and testing laboratory in Palo Alto, California, "Lyme would be the number one infectious disease in the United States and Western Europe."

Lyme disease was first recognized in the United States in 1975, after a mysterious outbreak of arthritis near Lyme, Connecticut. It wasn't until 1982 that the spirochete that causes Lyme was identified. It was subsequently named *Borrelia burgdorferi* (Bb), in honor of Willy Burgdorfer, Ph.D., a pioneer researcher.

Many now see the disease, also called Lyme borreliosis, as more than a simple infection, but rather as a complex illness that can consist of other co-infections, especially of the parasitic pathogens Babesia and Ehrlichia. Animal studies have shown that in less than a week after being infected, the Lyme spirochete can be deeply embedded inside tendons, muscles, tissue, the heart and the brain.

"Of the more than 5,000 children I've treated, 240 have been born with the disease," says Dr. Jones, who specializes in Pediatric and Adolescent Medicine. "Twelve children who've been breast-fed have subsequently developed Lyme.

Bb can be transmitted transplacentally, even with in vitro fertilization; I've seen eight children infected in this way. People from Asia who come to me with the classic Lyme rash have been infected by fleas and gnats."

Gregory Bach, D.O., presented a study on transmission via semen at the American Psychiatric Association meeting in Novem-

ber, 2000. He confirmed Bb DNA in semen using the PCR test (Polymerase Chain Reaction).

Dr. Bach calls Bb "a brother" to the syphilis spirochete because of their genetic similarities. For that reason, when he treats a Lyme patient in a relationship, he often treats the spouse; otherwise, he says, they can just pass the Bb back and forth, reinfecting each other.

Dr. Tang adds other avenues of infection: "Transmission may also occur via blood transfusion and through the bite of mosquitoes or other insects." Dr. Cowden contends that unpasteurized goat or cow milk can infect a person with Bb.

Unreliable Testing

What is the reason for the discrepancy between the government's statistics and the experience of front-line physicians? Says Dr. Jones, "The CDC criteria was developed only for surveillance; it was never meant for diagnosis.

Lyme is a clinical diagnosis. The test evidence may be used to support a clinical diagnosis, but it doesn't prove one has Lyme. About 50% of patients I've seen have been seronegative [blood test negative] for Lyme but meet all the clinical criteria."

Most of the standard tests used to detect Lyme are notoriously unreliable. Explains Dr. Harris, "The initial thing patients usually get is a Western Blot antibody test. This test is not positive immediately after Bb exposure, and only 60% or 70% of people ever show antibodies to Bb."

Dr. Cowden favors two tests developed respectively by Dr. Whitaker and by Lida Mattman, Ph.D., [former] Director of the Nelson Medical Research Institute in Warren, Michigan. [Dr. Nelson is now deceased. Ed.] However, both of these tests have yet to win FDA approval for diagnostic use.

Explains Dr. Whitaker, "We have developed the Rapid Identification of Bb (RIBb) test. A highly purified fluorescent antibody stain specific for Bb is used to detect the organism. This test provides results in 20 to 30 minutes, a key to getting the right treatment started quickly."

Dr. Mattman's culture test also uses a fluorescent antibody staining technique which allows her to study live cultures under a fluorescent microscope. "When a person is sick," says Dr. Mattman, "antibodies get tied up in the tissues, in what is called an immune complex, and are not detected in the patient's blood plasma.

So it's not that the antibody isn't there or hasn't been produced; it just isn't detectable. Thus, the tests which are based on detecting antibodies give false negatives." The tests of Drs. Whitaker and Mattman do not look for antibodies but look for the organism, in the same way that tuberculosis is diagnosed.

When Dr. Jones treats a Lyme patient who's in a relationship, he often treats the spouse as well; otherwise, he says, they can just pass the Bb back and forth, reinfecting each other.

There are several reasons why Lyme is so difficult to test for — and difficult to treat. Take, for instance, the bull's-eye rash — called Erythema migrans — that is supposed to appear after being bitten by a tick carrying the Lyme spirochete.

Every doctor with whom the authors spoke said that this rash appears in only 30% to 40% of infected people. Dr. Jones said that fewer than 10% of the infected children he sees exhibit the rash.

A Master Of Elusiveness

More importantly, Lyme can disseminate throughout the body remarkably rapidly. In its classic spirochete form, the bacteria can contract like a large muscle and twist to propel itself forward: because of this spring-like action it can actually swim better in tissue than in blood.

It can travel through blood vessel walls and through connective tissue. Animal studies have shown that in less than a week after being infected, the Lyme spirochete can be deeply embedded inside

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment. tendons, muscle, the heart and the brain. It invades tissue, replicates and destroys its host cell as it emerges. Sometimes the cell wall collapses around the bacterium, forming a cloaking device, allowing it to evade detection by many tests and by the body's immune system.

The Lyme spirochete (Bb) is pleomorphic, meaning that it can radically change form. The photo on the left shows a colony of Bb both in spirochete and round cell wall deficient (CWD) forms. [See *Cell Wall Deficient Forms: Stealth Pathogens*, 3rd Edition, Lida H. Mattman, Ph.D., CRC Press, 2001, Ed.]

In the CWD form, the Lyme organism can lack the membrane information necessary for the immune system and antibiotics to recognize and attack it. Dr. Lida Mattman states that cell wall deficient organisms are more properly called cell wall divergent.

The Lyme spirochete can not only change from the classic spiral into a round form, but can change back again into a spiral. The middle photo shows this process occurring in the area shown by the arrow. [See *Cell Wall Deficient Forms: Stealth Pathogens*, 3rd Edition, Lida H. Mattman, Ph.D., CRC Press, 2001, Ed.]

But the main reason that Lyme is so resistant to detection and therapy is that it can radically change form — it is pleomorphic. Explains Dr. Whitaker, "We have examined blood samples from over 800 patients with clinically diagnosed Lyme disease with the RiBb test and have rarely seen Bb in anything but a cell wall deficient (CWD) form.

The problem is that a CWD organism doesn't have a fixed exterior membrane presenting information — a target — that would allow our immune systems or drugs to attack it, or allow most current tests to detect it."

As a CWD organism, says Dr. Mattman, Bb is extremely diverse in its appearance, its activity and its vulnerability. Adds Dr. Cowden, "Because Bb is very pleomorphic, you can't expect any one antibiotic to be effective. Also, bacteria share genetic material with one another, so the offspring of the next bug can have a new genetic sequence that can resist the antibiotic."

Clinical Diagnosis

The doctors the authors interviewed all had their own testing preferences, but each insisted that Lyme was a clinical diagnosis, only supported by testing — and retesting.

"We look at the patient's history and symptoms, genetic tendencies, metabolism, past immune function problems or infection," explains Dr. Bock, "as well as history and duration of antibiotic treatment, co-infection, nutritional and micronutritional status and also psychospiritual factors."

Dr. Tang uses all of the above, but also analyzes the blood using darkfield microscopy — although she cautions that not spotting the spirochete doesn't mean that the patient does not have Lyme disease.

Dr. Cowden also employs muscle testing and electrodermal screening. Dr. Burrascano has developed a weighted list of diagnostic criteria and an exhaustive symptom checklist.

"In pediatric screening especially," says Dr. Jones, "we ask about sudden, sometimes subtle, changes in behavior or cognitive function — such as losing skills or losing the ability to learn new material; not wanting to play or go outside; running a fever; being sensitive to light or noise.

If one has joint phenomena, we know that an inflammatory or infectious process is present. A hallmark of Lyme is fatigue unrelieved by rest."

For women, Dr. Barkley has found that testing around the time of menses increases the probability of discovering the presence of Bb. "Women with Lyme have an exacerbation of their symptoms around menses," she explains.

"The decline of both estrogen and progesterone at the end of the

menstrual cycle is associated with the worsening of the patient's Lyme symptoms."

Government Persecution Of Lyme Disease Doctors

Physicians who treat Lyme disease in ways other than the established standard of care — which means a course of antibiotics lasting no more than 30 days — risk invasive, exhausting, time-consuming investigation by state licensing agencies, leading to possible loss of their right to practice medicine.

Activists report that 50 physicians in Texas, New York, Oregon, Rhode Island, New Jersey, Connecticut and Michigan have been investigated, disciplined and/or stripped of their licenses over the past three years because of their approach to healing Lyme disease.

This past November 9th, 500 patients who got well after their doctors used alternative or complementary methods joined in a protest rally in New York City. They rose to defend Dr. Joseph Burrascano, who has treated an estimated 7,000 cases.

As this story was heading for publication, New York's Office of Professional Medical Misconduct was engaged in what activists call an unjustified fishing expedition that will probably last for months and will allow state bureaucrats to hunt for any irregularity that could be used to damage Dr. Burrascano.

State medical boards seem to be trying to protect the medical insurance industry rather than patients.

In most cases, effective alternative/complementary treatments require much more doctor time per patient and often include a broad range of medicines and supplements consumed over a much longer period of time, costing much more money than the current standard of care accepted by medical insurers.

But at the rally, patients angrily rejected the medical board's suggestion that their cases demonstrated anything negative about their physician. In fact, they all insisted, it was Dr. Burrascano whose knowledge, patience and care finally freed them from the pain and debilitation that had been ruining the quality of their lives.

Antibiotic Treatment

Every authority the authors spoke with considered antibiotics the primary treatment for Lyme, but that the accepted "standard" antibiotic therapies (of a duration and type acceptable to insurance carriers, HMOs, mainstream physicians, etc.) are insufficient.

Lyme is sometimes classified as having different stages — early vs. chronic, or localized vs. disseminated. "The biggest distinction is between early-stage and chronic," says Dr. Whitaker.

"In the beginning, many organ systems are invaded while the patient may experience no symptoms.

As time goes on we see multiple system symptoms involving the whole body, especially the central and peripheral nervous systems, and the musculoskeletal, skin and circulatory systems.

Many Lyme cases are diagnosed by psychiatrists. Dr. Brian Fallon is studying cognitive and other neuropsychiatric manifestations."

The problem, says Dr. Barkley, is that "There isn't an adequate treatment model. So if the physician says you have Lyme, and gives you the standard antibiotic therapy, and you aren't better, the thinking is that you must have something else wrong, such as an autoimmune problem, or else you didn't have Lyme disease in the first place.

Short-term oral antibiotics are effective in treating localized Lyme, but with disseminated Lyme, the requirement for either intravenously administered antibiotics or long-term oral antibiotics becomes common."

In his regular practice, Dr. Bock has always tried to avoid antibiotics. But, he says, "If you go back to syphilis, the history of spirochetes is one of being able to hide out and then reappear, caus-

Medical data is for informational purposes only. You should always consult your family physician, or one of our referral physicians prior to treatment. ing severe, devastating neurological illness. This isn't a risk I would recommend taking with Bb."

Most of the physicians recommended an immediate short course of antibiotics for anyone bitten by a deer tick, or who exhibits certain symptoms. "It takes a while for the immune system to produce antibodies," says Dr. Barkley.

"So Lyme testing — other than by a skin biopsy from an active rash within 14 days following the bite — may yield inconclusive results. Symptoms of Lyme include fever, night sweats, fatigue or a flu-like illness that does not improve within three to five days." Other symptoms reported by physicians include stiff neck, prolonged joint and muscle pain, heart palpitations, brain fog or severe headaches.

"I tally all the initial symptoms and signs, and try to weed them out one by one," says Dr. Jones. However, he cautions, "Treatment duration varies with each individual. If one stops antibiotics prematurely, a more resilient Bb infection will develop that will cause more brain and body injury."

Adjunct Therapies

None of these physicians relied solely on antibiotics; they used immune system-strengthening protocols as well.

"The immune system may be less able to respond if the person is having a hard time clearing toxins," says Dr. Bock. "You're going to add to this overload by taking antibiotics. For general immune support, we've used maitake and reishi mushrooms, ginseng and astragalus.

"Natural medicine approaches include anti-inflammatory eicosanoids such as fish oil and borage seed oil; high-potency multivitamin and mineral formulas; CoQ₁₀ and other mitochondrial nutrients; cognitive enhancement substances such as carnitine and certain herbal extracts.

Acupuncture combined with physical therapy can often reduce pain. I have posted an article online that discusses these alternative approaches in more depth at my website, <http://www.PatientsAmerica.com>."

Dr. Cowden recited a litany of natural immunotherapy agents. His recommendations include the following: "Transfer factor — ImmuneFactor 2 and Cell Response are good products; Thymic Protein A; medicinal mushroom combinations such as ImmPower AHCC; glyconutrients like Ambrotose; arabinogalactan (Larix), an immune-enhancing polysaccharide; and Astragalus Supreme."

Dr. Cowden also notes that "if you use a pharmaceutical antibiotic, you need to use an herbal antifungal to reduce stress on the liver and kidneys."

Polly Houston, stroke victim and author of *Stroke: Recovery With Oxygen* (ISBN: 1-930536-21-6) reports on successful use of hyperbaric oxygen treatments for those afflicted with Lyme disease. As the spirochete that causes the troubling infestation is anerobic (lives without oxygen), then oxygen under pressure seems to help some folks fight this microbe, thus improving their health.

Lifestyle Changes

"Avoid sugars because they feed these bugs," advises Dr. Cowden. "It is most important to balance saliva pH between 6.7 and 7.0. Sufficient dietary minerals bring pH up if low. Reducing stress will raise pH; so will identifying and removing food, nutrient and inhalant allergies. You should identify your metabolic type and then follow the appropriate diet.

Grapefruit seed extract and certain other substances, including vitamin C, can interfere with tissue uptake of the antibiotics and make them less effective. Take as few non-essential supplements as possible — consult with a physician knowledgeable about nutrition — and time them as far from the antibiotic as possible."

Dr. Bock reminds us that, "It's also important to support the endocrine system. In some cases, cognitive abilities improved when

subclinical hypothyroid problems were treated. Chronic stress can cause suppression of the immune system. Manage the effects of stress on the body

Use relaxation techniques and biofeedback. Find a group for emotional support."

In his practice, Dr. Jones has found that, "Taking acidophilus and other probiotics is always important." [Antibiotics kill the intestinal flora necessary for digestion and immune functions; probiotics like lactobacillus re-inoculate the intestines.] [See Friendly Bacteria -- *Lactobacillus acidophilus* & *Bifido bacterium*, <http://www.arthritistrust.org>, Ed.]

Stay away from or severely limit alcohol intake. Develop a healthier standard of living. Rest is needed. We've found that a parent who has a child with Lyme is often feeling guilty. One has to work with these difficult feelings. I emphasize that it's not a parent's fault; you can't protect your child from Lyme exposure."

Present Limitations

None of the experts the authors consulted claimed to completely understand Lyme or to be able to completely cure it in every case. Some people infected with Bb may never manifest the symptoms of Lyme.

Others become seriously ill soon after they are infected. Treatment must be customized from patient to patient and can vary widely. "Certain people may clear Lyme without antibiotic therapy," says Dr. Barkley. "However, the other extreme is that even with antibiotics, some people with Lyme have died from this disease."

Says Dr. Jones, "We have seen children from one day old to 18 years of age who have required from three months to six years of antibiotic therapy. We have had some patients on antibiotic therapy for very long periods, and we've done follow-ups for as long as 15 years post-treatment.

The criterion for stopping therapy is that one must be totally Lyme disease-symptom free for two months, with no Lyme flare induced by another infection or menses and no 'Herx' [Jarisch-Herxheimer reaction of the body manifesting symptoms in response to dying Bb]. [See "The Herxheimer Effect," <http://www.arthritistrust.org>, Ed.]

"There are very few symptoms where you shouldn't consider Lyme," says Dr. Cowden. "more than 50% of chronically ill people may have Lyme contributing to their condition."

The situation is quite difficult now. "It's sad where we are with this disease," says Dr. Cowden. "You're supposed to go through the 'standard' treatment first before turning to alternative treatments. We need to turn this around, into a logical, integrated approach."

The impetus for this change must come not only from the patients who have been classically infected by a tick bite, but by those who suffer from "unexplained" muscle and joint pain, unrelieved fatigue and cognitive impairment — and by those who are afflicted with degenerative diseases that can be caused or aggravated by Lyme.

Presently, such patients will find few doctors experienced in Lyme, because of the newness of the disease and lack of understanding about it — and because those doctors who take a comprehensive approach to diagnosing and treating Lyme are commonly harassed by state medical boards, insurance companies and HMOs.

It is up to patients to actually educate their doctors about the inadequacy of standard testing and the necessity for using techniques such as electrodermal screening and darkfield microscopy. And it is up to patients to become politically involved with Lyme advocacy groups, such as those listed here, to fight for their right to proper medical care.

The earlier Lyme is diagnosed, the easier it is to cure.

For people with chronic Lyme symptoms, the road to recovery can be long. With comprehensive integrative treatment, however —

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a combination of the best of conventional and alternative medicine protocols — their health can be continually and dramatically improved.

[[http://www.Alternative Medicine.com](http://www.AlternativeMedicine.com) Issue 41]

DR. MERCOLA'S COMMENT:

I just recently learned that Dr. Whitaker, who is one of the top Lyme experts in the country, has been doing a precursor of NST work, Bowen, for nearly ten years. She actually went to Australia to learn it.

It is her belief that NST is one of the more important aspects of a successful treatment strategy for Lyme Disease. The apparent mechanism is a balancing of the autonomic nervous system and secondary improvement in the immune system.

This certainly has been my experience with rheumatoid arthritis.

Dr. Klinghardt, who was not interviewed for this article, also has a considerable amount of clinical experience with Lyme Disease and has found bee venom therapy to be helpful. There is a link to the protocol below.

If you haven't clicked on the original link back to Alternative Medicine.com please do as they have some excellent Live Cell Darkfield microscopy pictures of the Lyme disease bacteria.

Related Articles:

Bee Venom Protocol For Lyme's Disease
Lyme Disease Cases Up 70% in the 1990s
Lyme Disease Underreported

Websites:

<http://www.actionlyme.com/>
<http://www.arthritistrust.org/>
<http://www.canlyme.com>
<http://www.geocities.com/lymeart3/lyme-misdiagnosed-as.html>
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