In the spring of 2011 Heiner Fruehauf, PhD, LAc sat down with his student and colleague, Bob Quinn, DAOM, LAc to discuss the finer points of "Brain Gu" syndrome, specifically as it pertains to the treatment of Lyme Disease. This discussion is best understood as a follow-up to and elaboration of the ideas presented in Heiner and Quinn's earlier interview about Gu syndrome published in the fall of 2008.

# Lyme Disease

#### AN IN-DEPTH INTERVIEW WITH HEINER FRUEHAUF



**Quinn:** Welcome Heiner. It is nice to sit and have a cup of tea with you to discuss one of the most perplexing health conditions of this time, Lyme disease. I wanted to start by establishing your own experience in this area.

Heiner: I have been seeing Lyme patients since the time I started my practice, more than 20 years ago. At first I wasn't aware of what I was treating. I was differentiating symptoms and tried to devise a traditional diagnosis that fit the overall picture as closely as possible. I see this conversation as a follow-up to our earlier discussion on Gu Syndrome. After many years of treating Lyme disease with Chinese herbs, I can say with great certainty that, from a classical Chinese perspective, Lyme is a specific type of Gu Syndrome.

When I initially began my *Gu* Syndrome research, I saw a number of patients who were young Peace Core volunteers returning from Africa and South America with intestinal parasites. Most likely, they were suffering from a combination of different protozoan infections. These infections wouldn't go away with the conventional Chinese treatments for parasitic diarrhea, or bloating and constipation. In addition to a host of chronic digestive symptoms, I found a prevalence of mental/cognitive symptoms in these patients, such as anxiety and insomnia. I soon felt that the clinical methods I was familiar with

at the time were not adequate to solve this clinical picture.

Fortunately, at this point in my career I still had plenty of time to shift into research gear. After immersing myself in a lot of clinical case studies preserved in premodern China's medical literature, I came across the concept of Gu Syndrome. The word Gu is one of the oldest Chinese characters. Hexagram Eighteen of the ancient Yijing (Classic of Change) is entitled Gu: Rottenness. One frequently comes across the word in Chinese language, but never really considers it, including native Chinese speakers. It is like the word "magic" in the English language. You use it to conjure up an atmosphere, but never think about what it really means.

As a clinical concept, I found Gu most interesting. Every major medical book in ancient China, starting with the Neijing (Yellow Emperor's Classic of Medicine), mentions Gu as something that is common, yet very entrenched and difficult to treat. The most remarkable diagnostic advice I gleaned from these texts is that our regular diagnostic parameters won't get traction in patients suffering from Gu syndrome. Gu patients, for instance, manifest with symptoms that look like spleen qi deficiency, yet the normal methods to treat their fatigue, bloating, and digestive issues do not work. As a matter of fact, they may get worse with conventional treatment. It is one of the diagnostic parameters of Gu syndrome that the herb Renshen (ginseng), generally regarded as the prototypical spleen qi tonic, is contraindicated in this condition and will worsen symptoms. It appears that in a Gu patient, Renshen, Dangshen (codonopsis) and similar qi tonics boost not only the immune system, but invigorate the pathogen as well. Therefore, one classical Gu expert once stated that "Gu syndrome may look like chronic diarrhea, but if you treat it like the regular type of diarrhea it does not work. It may look like chronic constipation, but if you treat it like regular constipation, it does not work."

Incorporating this important yet forgotten clinical advice, I embarked on a journey of more than 15 years of diagnosing and treating people suffering from *Gu* syndrome. In this process, I gradually zeroed in on a group of remedies and herbs that are in a class of their own. Just as modern Chinese physicians have established an anti-cancer materia medica in recent years, I read through all relevant texts and worked to establish an anti-*Gu*—or, in the widest possible sense of meaning, an anti-chronic inflammatory syndrome—materia medica.

**Quinn:** You have an interesting way of differentiating Gu into brain and digestive Gu categories. Can you go into that a bit?

After a while, I discovered that there are two major groups of patients with Gu syndrome. I labeled them "Digestive Gu" and "Brain Gu". Digestive Gu is characterized by a condition in which inflammation is limited to the digestive tract. Through the close relationship of gut chemistry and brain chemistry, this condition has the potential to affect the mood considerably. However, in this condition the nervous system itself is only secondarily affected, and not primarily inflamed. In Brain Gu, on the other hand, for which Lyme disease is the most typical manifestation today, the nervous system is the primary focus of infection. These cases may also exhibit some digestive symptoms, since so many nerve strands encircle the small intestine (which is connected to the heart in Chinese medicine), but digestive issues are only the secondary concern here. You can recognize Brain Gu patients based on their fragile cognitive and emotional state. Since the nervous system is inflamed, patients are constantly struggling to maintain their mental faculties, and often ride an intense emotional rollercoaster. In addition, they may talk about extremely sensitive gut reactions.

In Western terms, Brain *Gu* incorporates a wide range of nervous system diseases that are associated with a host of tortuous symptoms, and that in most cases are hard to diagnose: Lyme disease, which is associated

with the specific pathogen Borrelia burgdorferi; coinfections of Lyme, i.e. babesiosis (piroplasmosis, texas cattle fever, tick fever), bartonellosis (cat scratch disease, trench fever, Carrion's disease), ehrlichiosis (tick fever), anaplasmosis, rickettsiosis (Rocky Mountain spotted fever, certain types of typhus), tickborne encephalitis (TBE), tularemia (Pahvant Valley plague, rabbit fever); and other chronic nervous system infections most often transmitted by the bites of ticks, mosquitoes, flees, lice, and spiders.

The most obvious ancient Chinese equivalent to these types of modern Brain Gu infections is malaria. The word Nüe 瘧 ("malaria") is often mentioned in the Chinese medical classics alongside Gu syndrome. It literally means "torture disease." Just like there are hundreds of types of spirochetes that can potentially cause the variegated syndromes now commonly synthesized under the term Lyme disease, many different types of Nüe syndrome were recorded in ancient texts. In addition to the viral and spirochetal pathogens mentioned above, they encompass a broad range of nervous system afflictions endemic to the jungle regions of Southeast Asia, such as malaria, Dengue fever, and leptospirosis. The West Nile virus also belongs to this class of pathogens. In addition, many mystery syndromes such as Morgellon's disease can potentially be associated with Brain Gu.

modern medicine, there is a common misunderstanding about the nature of these pathogens. Most physicians believe that they are highly localized, for example in a distant region dominated by swamps or jungles. They are viewed as contained—as something that doesn't spread uncontrollably beyond its point of origin. Infection is therefore thought to be rare, caused by the highly unlikely scenario of being bitten by an exotic animal that transmits a bizarre parasite. It is my personal experience, however, that infection by pathogenic agents inflaming the nervous system represents one of the biggest epidemics of our time. I am basing this sweeping statement on 20 years of observing patients who suffer from severe and debilitating symptoms—and yet have been diagnosed by the regular medical system as having "nothing." Lyme and its co-infections make up about 30 percent of my current practice. Most likely, a variety of different factors, such as global warming, progressing globalization, international travel, and chronically depressed immune systems may be the cause of this phenomenon.

I would like to ask my fellow practitioners in the natural medicine community to be on the lookout for these patients. Don't be afraid of long treatment times and symptom pictures that make little sense from a traditional perspective. Chinese medicine has real answers for these patients, and it is an opportunity to work with this unusual yet not uncommon syndrome. However, it is important not to revert back to common herbal prescriptions for fatigue and anxiety/depression learned in school, such as Liujunzi Tang or Guipi Tang or Xiaoyao San-in Brain Gu patients, you won't make much headway with these. The average TCM practitioner tends to refer this type of patient to an MD, chiropractor or naturopathic physician, most often because of a perceived lack of solutions for this complex and high-maintenance disease. The Gu classics of Chinese medicine, however, offer the most sophisticated and clinically useful solutions for Lyme and Lyme-like infections of the nervous system that are available to us today. In treating Lyme, we need to mimic the behavior of the pathogen itself: be able to adapt to ever changing symptom pictures, and stay ahead of the spirochete's ability to camouflage and transform itself, by constantly changing the details of our prescription within an overall anti-Gu and proterrain approach. This is the method the Gu classics convey, and what I see lacking in most modern treatment plans.

At the same time, it is important to know that the treatment of this condition is not as complex as it may appear. I have spent much time synthesizing the ancient *Gu* teachings into a modular approach that can be implemented by modern practitioners. First of all, we need to recognize that Lyme disease patients always present with 1) pathogenic influences

(spirochetal infection or, in Chinese terms, *fengnüe*: "torturous wind" invasion), and 2) deficiencies on all levels, which opened the door to the infection in the first place. Every successful approach to the treatment of Lyme needs to have multiple building blocks that can be combined in flexible ways, and that address both of these deficiency and excess aspects of this disease. In addition, we and our patients need to be prepared to administer treatment over a long period of time. Otherwise, the terrain cannot be restored and the parasitic load will not be reduced in a lasting manner.

My goal, therefore, is to share a treatment approach to Lyme that is backed by historic depth and age-old clinical experience. At the same time, I will outline a series of herbal building blocks that can be combined in modular fashion, and which are simple enough to learn that they can be safely prescribed in Western TCM clinics.

Before we get there, it is important to emphasize that both practitioner and patient need to be prepared to ride what I have called "the rollercoaster." Even in the best-case scenario, these patients will be like the proverbial canary in the coal mine for a long time. Even if you manage to get symptomatic relief right away, there will come the inevitable solar flare, or atmospheric pressure change, or individual stress, causing things to dip again for a while. For most Lyme patients, two steps forward and one step back—and plateauing in between—are the normal form of progression on the road towards recovery.

Quinn: In your answer, I hear you emphasize the words "complexity" and "sophistication." One thing I see when I look at the web sites of practitioners who advertise that they treat Lyme from a Chinese medical perspective, is that they seem to have noticed that their Western medical counterparts are relying on a vast array of anti-biotic drugs. Lyme-literate physicians are trying to do that intelligently with knowledge of when certain drugs are needed over others. Many TCM practitioners, in contrast, are simply trying to

duplicate the anti-biotic effect with cold and bitter herbs. Could you briefly comment on the practice of relying on herbs that, in the long term, will probably damage healthy immune function and digestion?

Heiner: That is an excellent point—the Chinese term shang 傷 (injury), after all, specifically means injury to the warming (yang) forces in the body. My Lyme patients often bring bags of cooling herbs and prescriptions when they first come in. From a holistic perspective, however, it is very important that we restore the body's ability to police itself. This can only be done if the overall approach adds to, rather than decreases, the body's yang forces. This is the only way for a Lyme patient to sustain the long-term treatment necessary to rout the intrepid intruders. Lyme is tenacious—there is a reason microorganisms like borrelia were likened to "demons" in ancient medical texts.

The conventional treatment of taking antibiotics for months or even years may alleviate the symptoms experienced by patients. However, since antibiotics are a typical example of a substance that clears yangming heat, a price will eventually have to be paid for this type of treatment. The word antibiotic means anti-life medicine. In the most general terms, it is born of a scientific philosophy that is essentially biophobic afraid of nature, and untrusting of the inherent ability of life processes to regulate themselves. This way of thinking looks at life as something that is chaotic, in need of being subdued and controlled. In contrast to this, true holistic medicine is inherently biophilic. As natural medicine practitioners, it is part of our mission statement that we love life and trust in the complexity and multi-dimensional quality of life's powers. We always want to do our best to work with the life force rather than against it.

It has been a characteristic feature of western oriented TCM to utilize herbs according to parameters established by laboratory research. As a spirochete, Borrelia burgdorferi belongs to a particularly vicious subgroup of bacteria. A research-based form of

herbalism naturally leads a modern TCM practitioner to use "antibacterial" herbs. These herbs tend to be primarily bitter and cold in nature, for example *Huangqin* (scutellaria), *Huanglian* (coptis), and even more bitter and stronger herbs like *Chuanxinlian* (andrographis). Most self-help books on Lyme that include Chinese herbs recommend materials that belong to the *qingre jiedu* category of traditional Chinese pharmacology, herbs that "clear heat and resolve toxicity."

In addition to these cold and bitter substances, there tend to be many anti-parasitic supplements on the market that contain strongly aromatic herbs, such as clove, or the more astringent black walnut hulls. After imbibing these kinds of herbs, many chronically infected patients will feel better for three days. In the long run, however, this type of treatment proves to be too harsh on the digestive system and the immune system. This is especially true if the single herb remedies are not alternated in regular intervals. The bitter-cold approach, especially, is what we see most modern Chinese medical practitioners prescribing whenever infection is suspected. I feel strongly that Lyme disease is a disorder that Chinese herbal medicine can treat successfully. We should make it a point to learn more about Lyme, even specialize in the treatment of this condition, but I recommend avoiding the exclusive use of bitter-cold or aromatic herb cocktails that are prescribed over and over again without variation.

Let us take the Gu syndrome discussion a little further by making it more specific to Lyme disease. As I mentioned earlier,  $N\ddot{u}e$  is an ancient disease name that warrants investigation when exploring the clinical phenomenon of Brain Gu. Some Lyme patients even exhibit the alternating hot and cold symptoms that are so typical for malaria, the most common form of  $N\ddot{u}e$  disease.  $N\ddot{u}e$  literally means "torture disease." In the so-called oracle bones, China's earliest form of writing from 3,500 years ago, this term is often associated with the characters Gu and Gui E (demon). Together, these three words combine their dark symbolism to denote

calamity or disaster—something terrible, the worst thing that could ever happen to you. These drastic images can help us recognize a person who suffers from chronic nervous system inflammation. Lyme patients often say "I feel like I am being tortured," "My life is terrible", "I am suffering", "I want a new body", "I can't take it anymore." Lyme disease is Gu and  $N\ddot{u}e$  at the same time: a super-infection of different strains of parasitic organisms that gradually hollow out and waste their host (Gu), and at the same time create great mental, physical and emotional suffering  $(N\ddot{u}e)$  in the process.

What both Gu and Nüe have in common from a Chinese medicine perspective is the involvement of wind (feng) and damp (shi), as well as the presence of submerged pathogens that will stay in the body for a long time (fuxie). The wind component is especially important for the understanding of Lyme disease and other Brain Gu conditions. The Neijing features two chapters about Nüe disease, namely chapters 35 and 36 in the Suwen part of the Neijing. Altogether, classical sources list about twenty different types of Nüe. Wennüe, or the epidemic warm disease type of Nüe, is most likely what we today identify as malaria. Fengnüe (wind Nüe) is the most common term, which appears to be a general qualifyer for all types of Nüe. Nüe disease is therefore not only directly associated with Gu syndrome, but also associated with the term wind. Note that the word feng 風 (wind) contains the character for worm or parasite (chong !!) inside, and that hexagram 18 (Gu) is composed of the trigrams "Wind" under "Mountain."

The ancient Chinese creators of pictographs were amazing in their ability to capture the multidimensional layers contained in a concept or event with one symbol. In Chinese terms, autoimmune processes that often appear alongside long-standing spirochete infections are also considered a type of wind. Therefore, both the actual disease and its potential autoimmune sequella can be described with the term wind. Furthermore, if we slightly modify the Chinese character for wind to form the word "wind disease" (feng 瘋), we get the common Chinese word for craziness. The Daoist sage Ge Hong, who wrote one of the first Chinese prescription books 1700 years ago, arranged his Zhouhou fang (Formulas Up the Sleeve) such that his chapter on Nüe is followed by a chapter on fengkuang 瘋狂 (mental illness). The terms feng and kuang describe many of the cognitive and emotional issues that Lyme patients suffer from.

**Quinn:** What you are saying here about *Nüe* is fascinating. So many Chinese medicine practitioners face patients on an almost daily basis with these sorts of emotional and cognitive challenges. Often they come to us after having been told by their PCPs that there is nothing wrong with them.

Heiner: In many Lyme patients, not too many pathological changes can be detected in the blood. Their internal organs often have not deteriorated enough to register suspicious values in standard tests. The brain and the spinal medulla, however, are affected from the onset. Tick induced viruses and spirochetes love to hide in nerve tissue and create their mischief there. Due to the protective function of the blood-brain barrier, our immune system has only limited access to the brain, and thus has a particularly difficult time fighting pathogens in this area. Lyme patients thus often have intense cognitive and neurological symptoms, but according to their blood work it appears that there is nothing wrong with them.

I clearly remember one of my patients, a successful executive at a leading computer company. She was a young and beautiful woman in her thirties. When she came to see me, she told me that during the last several years she had become more and more foggy, tired, and depressed. She wanted to sleep all the time and to be in the dark. This was almost 20 years ago, and based on her pulse picture I prescribed Danggui Sini Tang plus some blood moving and detoxifying herbs—a similar approach I still use most often for potential degenerative sequellae to Lyme, such as MS, Parkinson's, ALS and Alzheimer's (see Evergreen

Pearls). At first, she felt like she was getting better, and chose to discontinue treatment due to the difficult commute between my clinic in Portland and her home in the Southwest. Six months later, I heard that she had curled up next to her fireplace and died—without any apparent medical reason. Today I believe that she probably suffered from a severe form of Lyme disease. Even in death, this patient eluded Western medical diagnosis.

The degenerative process initiated by Lyme is either so "stealth" that it can't be detected, or happens to make its home in a place where it can't be found. Due to the general lack of medical validation this type of person faces, Lyme patients suffer not only from the tremendous physical and emotional pain associated with this disease, but also from the fact that their doctors and even their family members often believe they are crazy. The people closest to them may say: "I don't know what to do with her anymore. She doesn't have anything wrong with her, but she doesn't want to work. She is so volatile emotionally. She has completely changed". The attitude reflected in these kinds of comments represent the ultimate torture for Lyme patients.

There are lots of chronically inflamed people out there who have never been diagnosed appropriately. As Chinese medical practitioners, it would be inappropriate for us to send them away. We should work with these patients, and encourage them throughout their arduous healing process: "Yes, it will take a long time, but there are solutions; time honored solutions that Chinese medicine has to offer."

**Quinn:** In this interview, we want to get into the specifics of which herbs you have had clinical success with and also provide some nuts and bolts information for the treatment of Lyme disease. But, before we get into this, I would like to ask a little bit more about the component of cognitive dysfunction or *shen* disturbance in patients with Lyme disease.

In my experience, it is really quite unique when you encounter this condition in a "Lyme complex" patient. You can witness this *shen* disturbance aspect of the condition in one of the patients featured in the documentary *Under Our Skin*. I am thinking of the woman who was working for the band U2. She doesn't look ill at all, and yet at one point she says, "You wouldn't believe the pain in my body."

I have seen similar patients who are saying that their pain is off the charts. You can see a kind of vacancy in their eyes. When you feel the pulse, it doesn't feel like they are in a lot of pain. When you palpate the abdomen, the quality of the skin is normal and there is an absence of tight or tender points. When you do range of motion exams, they have good range of motion in their major joints. You are left scratching your head and eventually you come back to that vacant look in their eye and you think, "Wow, I haven't encountered this with other people."

You can see how a standard medical practitioner might say that this patient is crazy. There is no standard evidence of pain. This is true even when we use Chinese medical diagnostic modalities, like for me the pulse or the abdomen. It is a perplexing thing when you meet a deeply *shen* damaged Lyme patient. Can you talk a little about treating this *shen* component of Lyme before we tackle the specifics of herbal treatment?

Heiner: I think we owe these patients a great deal of gratitude. As I mentioned already, they are the canaries in the coal mine of our time. Currently, our nervous systems are being challenged more than at any other time in the history of humankind. Lyme patients are registering things that we all feel. For most of us, however, our nervous systems are strong enough to withstand the higher pitch of vibration that comes with modern lifestyle and all the unprecedented magnetic and environmental disturbances we are experiencing on the planet right now. Recent clusters of solar flares, earthquakes, tsunamis and tornados are all natural signs of a heightened state of tension

in the environment. This uptick in energetic intensity takes a toll on everybody's nervous system, but is experienced as violent and anxiety provoking by most Lyme patients.

In my own clinical practice, I have observed that the one symptom most patients have in common, whether they suffer from Lyme or not, is anxiety. Even if they don't acknowledge it, they are suspended in a constant state of restlessness and jitteriness; a fear that something terrible is going to happen; that they are not in control; or that there is always one more thing they need to do. Lyme diseased patients who display the shen disturbance you described are, in a certain sense, magnifying this high pitch intensity that we are all affected by in one way or another. In other words, modern industrialized people, myself included, are all shen disturbed to a certain degree. When you go into remote areas where people still live in a tribal or nomadic way, where people are still living in communion with nature and are completely present, you can see immediately that their eyes are completely different from ours, so much more open and clear. The eyes are, of course, the key to diagnosing shen disturbance in Chinese medicine. I have seen people like these recognize shen disturbance in the modern travelers who happen to pass by their tents. Often, they feel sorry for us. "Why do you have all this fear in your eyes," they wonder. As practitioners, we need to remember this condition when we become disturbed or afraid of a Lyme patient. Rather than questioning the sanity of the patient, or categorizing Lyme suffering as deserved karmic retribution, we should let these cases serve as an extreme mirror for ourselves and the society we live in.

Lyme is a big clinical problem now, so big that we cannot avoid it. Sub-acute Lyme disease may currently be as endemic as herpes—which, by the way, is another agent that inflames the nervous system. Herpes is a virus that inflames the nervous system and makes it more brittle and fragile in the process. Some people experience no symptoms, while others have incredibly painful and violent outbreaks. Lyme

is similar that way. Individuals who don't have a weak nervous system or, as we would say from a perspective of Chinese Five Phase Element thinking, are not constitutionally weak, can fight off the degenerative effect of these pathogens more easily. However, in individuals whose Earth and Fire elements are weak, the parasite can invade the associated body layers and explode in them. It is the weak nervous system type that is prone to Brain Gu in general and Lyme in particular. The weak digestive type is more likely to contract intestinal parasites when exposed to them. In patients like this, the shen may be disturbed, but underneath there is most often a "fuxie", a wind pathogen that has invaded the body, digging itself deeper and deeper through the six layers until it has reached the shaoyin layer. At this depth, it affects the heart and the kidneys. The marrow of the spine and the brain traditionally belong to this deepest layer of the body. This is where it is the hardest to detect a pathogen and where it will cause the greatest damage.

In homeopathy, there are five hereditary miasms that have great similarities to the five constitutional types of Chinese medicine. The typical Brain *Gu* patient generally belongs to the syphilitic miasm. Syphilis, of course, is also a spirochete that is similar to the borrelia spirochete, hence the nickname "deer syphilis" for Lyme disease. Individuals with a syphilitic miasm generally display a constitutional predisposition for weak nervous systems. Generally speaking, the syphilitic miasm is the darkest of the homeopathic miasms. Tuberculinic types tend to be melancholic, while syphilitic types have a penchant for dark and hopeless moods. "No matter what I do," they think, "nothing will ever change."

The biggest challenge with Lyme is not so much that there is a *shen* disturbance, or that it may be difficult to treat from a standard TCM perspective. The most difficult thing is the "syphilitic" aspect of the patient's psyche, which is most often expressed by a gaping feeling of hopelessness. Most Lyme patients have an underlying voice in their head that seems to say, "I have already invested 15 years in the process of getting

better; it didn't work," and perhaps, "I will prove that your treatment will not work, either." In a certain way, this mentality is part of the disease. Even my front desk personnel has become skilled in recognizing patients suffering from Lyme or other forms of Brain *Gu*—they are invariably individuals that have a higher degree of doubt, ask a lot of questions, and thus require a higher degree of maintenance. They are the ones that tend to call your clinic shortly after an appointment, saying "I took only the tiniest dose of the herbs and experienced an explosion of symptoms. I feel worse now. I don't think this is going to work." This sort of inner *angst* is a common feature in Lyme patients.

Continuous education is therefore very important for Brain Gu patients. Their sense of hopelessness and the belief that nothing is going to work must gradually be transformed. While this happens, you need to hold the patient's hand for 3-5 years, and in some cases even longer. This is how long it realistically takes to reduce the presence of Lyme to levels that the immune system can handle. Our work is done when the remaining spirochetes, if there are any left, are like lichen on a tree. Lichen doesn't generally suffocate a tree, and the tree is able to thrive despite the presence of lichen, moss, mushrooms, bugs, and other organism that have chosen to make the tree their home. Furthermore, the patient's immune system must be supported until there are no more autoimmune reactions; in other words, until the body is confident that it is back in control and won't be overwhelmed by the scary invaders. This process will take a long time. If the infection is recent and the patient is younger, it may take three years. Otherwise, it will take five years or even longer, especially if the condition has been going on for decades and the person is extremely deficient to begin with. However, during this time the rollercoaster will gradually be climbing upwards-much better than the overall downward spiral they experienced before.

**Quinn:** You mentioned that syphilis is also a spirochete and that it has overlapping treatment strategies with Lyme. I would also like to mention a recent article

that was published in the *North American Journal of Oriental Medicine* that discusses moxibustion strategies for treating syphilis that were developed in Japan. The article discusses a few case studies that used syphilitic moxibustion strategies to treat Lyme patients in British Columbia. It appears that overlapping treatment strategies for Lyme and syphilis are not just effective in the realm of herbal medicine but also in adjunctive therapies like moxa. Maybe you can use this concept as a lead in for talking about specific herbal treatment strategies, including strategies from your own line of herbal formulas.

**Heiner:** To look at ancient treatment protocols for syphilis is indeed a good way to research classical solutions for Lyme. Syphilis is a spirochete like Lyme, and it also causes marked *shen* disturbance in its advanced stages. Syphilis can literally make people crazy as it degenerates the brain.

**Quinn:** Let me jump in there. I like to watch these detective shows on TV. There was a *Law and Order* episode years ago where the husband was crazy and dangerous to others. In the end it turned out that he had advanced syphilis. His condition looked a lot like an extreme case of Lyme disease.

Heiner: Yes, some of the other types of "malarial" diseases mentioned in ancient medical texts are Kuangnüe (Crazy Nüe disease), and Xiaonüe (Laughing Nüe disease). If you look long enough, you can probably find a condition called Criminal Nüe disease. This would include the impulsive and compulsive type of mental dysfunctions we see so often nowadays. All these are related to brain chemistry issues that can potentially be caused by nervous system inflammation.

Furthermore, it is interesting that you mention the use of moxa to "fumigate" the body in traditional treatments of syphilis and potentially Lyme. Moxa cones are made from Aiye (Mugwort: Artemisia vulgaris), a relative of Qinghao (Wormwood: Artemisia annua). Qinghao is highly regarded as a superior anti-

malaria agent by both Chinese and Western medicine. From a long-term treatment perspective, however, it needs to be noted that Aiye is considered to have a warming effect, while Qinghao and its popular modern extract (Artemisinin) are strongly cooling in nature. Moxa, therefore, gets a big "yes" from me for overall suitability in chronic Lyme patient treatment plans, while I recommend that the use of Qinghao be limited to the first 6 months of treatment; even then, it should be used in an environment of overall warming, or at least energetically more moderate, substances.

Moving on to the more specific discussion of traditional anti-Lyme herbs and formulas, I will start by outlining the primary herbal categories I recommend on the basis of classical medical texts for the treatment of Lyme disease:

The first and most important category for a traditional Brain Gu remedy consists of herbs that expel the "wind" we have been talking about. The Neijing emphasizes how the *shengren*, the sage and superior doctor, "takes great care to avoid wind influences like deadly arrows." It is clear that the wind diseases and even the shanghan (cold injury) disorders featured so prominently in the Neijing and Shanghan lun (Disorders Caused by Cold) are not limited to variations and sequelae of the common cold and arthritis, as often believed. They include the Lyme related jungle fever syndromes I keep mentioning. Diseases that are classified as "wind" in Chinese medicine exhibit a multitude of signature symptoms, i.e. a fluish and malaised feeling accompanied by a pronounced aversion to drafts and varying degrees of wandering pain in the head, neck, back and extremities. Most Lyme disease patients suffer from these symptoms. The Chinese concept of wind, moreover, generally implies a pathogenic attack from an outside source. One Chinese character for disease (ji 疾) literally depicts a person struck by an arrow, a graphic image for the phenomenon of external wind invasion. Lyme and other "wind torture" diseases most often enter the body through the bites of insect and other animals.

To treat Lyme-like diseases, the Gu classics therefore outline an approach that incorporates herbs with wind-dispelling effect—a relatively novel concept, since most of us have been conditioned to use winddispelling herbs only for acute disorders and for short periods of time. The first and most important category of traditional brain Gu treatment, therefore, does not feature botanicals considered to be directly anti-parasitic, such as Qinghao. It offers herbs that disperse wind, and at the same time limit damage to the patient's source qi (like Mahuang, ephedra), thus making them suitable for long term use. These herbs should further be combined with "internal herbs," such as anti-parasitic qi tonics, blood tonics, and yin tonics. This pairing will make them even safer for long-term use.

The next set of categories consists of anti-parasitic and immune-modulating herbs that are generally considered to be tonic, particularly for the damaged blood, qi, and yin aspects of the body. I have discussed these categories at length in previous interviews and articles on the general treatment of Gu syndrome. The blood and yin tonic categories are of particular interest in the treatment of Lyme. Note that China's first single herb classic, Shen Nong bencao jing (Shen Nong's Materia Medica), lists the famous blood tonic Danggui (Angelica sinensis) as an herb that treats malaria and other jungle fevers. Chuanxiong (Ligusticum wallichii) and the rarely used leaf of the same plant (Miwu), are particularly effective in alleviating headaches. Headaches are, of course, a major symptom for patients suffering from inflammation of the brain. Miwu is unfortunately not available in the West, so I began to manufacture it into a powdered extract myself, and import them under the Classical Pearls label.

There is also a category of herbs for body pain, which is another common symptom for Lyme patients. In this category, you have Xuduan (Dipsacus), which is often used as a Lyme treatment in the form of Teasel root tincture by naturopaths. I particularly like to use Wujiapi (Acanthopanax) for spirochetes. I also use

Shenjincao (Lycopodium) for arthritic body pain. I use Shenjincao not only for rheumatoid arthritis, which is often a sequella of Lyme, but also preventatively to guard against the emergence of rheumatic conditions in the future.

Another category of herbs addresses the notorious biofilm, a slimy matrix in which micro-organisms tend to embed themselves. This self-produced barrier enables the pathogens to evade attack by the immune system, and escape the noxious effect of anti-parasitic substances. This protective film is difficult to break open, transform, or expel. The ancient Chinese approach to Brain Gu pathogens appears to have accounted for this ohenomenon, since Gu Formulas regularly contain aromatic herbs that move qi and blood and are simultaneously anti-parasitic, such as Sanleng (Sparganium), Ezhu (Zedoria), Yuzhu (Curcuma) and Zelan (Lycopus). In addition, the earthworm Dilong (Lumbricus), represents the natural precursor to the extract Lumbrokinase, which some naturopaths and MDs now use for the specific purpose of breaking down biofilm. These herbs specifically address the problem of bio-film. The Chinese have used this approach for eons: use a worm to address another "worm" in you body, an almost homeopathic principle.

Finally, there are the herbs with a direct anti-parasitic effect, lead by Qinghao. There are lots of other anti-Gu and anti-malarial herbs in this category. Some are well known like Xuanshen (Scrofularia) and Tufuling (Smilax). Others are completely forgotten like Xuchangxing (Cynanchum) and Guijianyu (Euonymus alatus). In Chinese, the latter's name literally means "the arrow that kills demons." There is a long list of herbs in this category, and it is from here that most Western Lyme prescriptions are culled.

The next important category consists of herbs that stabilize the immune system to treat and prevent autoimmune complications. Spirochetesare recognized by our immune system as a particularly tricky invader; consequently, it often goes into overdrive in

response to the presence of these pathogens. Among the Chinese organ networks, it is the Spleen that is most often implicated in autoimmune processes. Some Chinese medicine texts, therefore, describe the Spleen as "the mother of all wind." On the Chinese organ clock, for instance, the Spleen is located in the position of the 4th lunar month, which used to be called the "wind corner" of the zodiac. It is important to point out that herbs affecting the Spleen were not exclusively thought of as qi tonics such as ginseng and astragalus. Ancient texts also relate certain herbs that clear wind and blood heat to the Spleen. Three herbs that I find particularly important in this context are the classic food items Wanggua (Snake gourd), Jicai (Shepherd's purse) and Kucai (Hare's lettuce). These herbs are never used as ingredients in Chinese herbal formulas anymore, but I find them exceedingly useful and have begun to import them as part of the Classical Pearl powdered extract series, as well.

The last, and perhaps most important, category in this anti-Lyme material medica is composed of warming and strongly anti-parasitic herbs from the aconite family. During the last three years, when I synthesized the knowledge transmitted in the classic Gu texts into a general approach to Lyme, I concluded that the use of aconite is indispensible for most Brain Gu patients, especially in the middle and later stages of treatment. I have found different varietals of aconite to be integral elements of a long-term treatment plan for Lyme disease and other forms of nervous system inflammation, specifically Fuzi (lateral offshoots of Aconitum carmichaelii root), Chuanwu (taproot root of same plant) and Caowu (Aconitum kusnezoffii). At the beginning of this discussion, I emphasized how important I believe it is to work WITH the life force rather than against it—recommending, in essence, a sustained support of the body's yang qi. The brighter the body's alarm lights are turned on-and few pathogens activate emotional and physical symptoms like Lyme spirochetes—the greater the stress and the gradual depletion of the body's yang forces. At the beginning of therapy, Lyme patients may exhibit superficial signs of heat, such as rapid pulses, rashes,

feverish sensations, and nightsweats, yet these most often mask an underlying condition of coldness and exhaustion. Once these symptoms disappear with the moderate to slightly cooling approach outlined in the design of Lightning Pearls, Thunder Pearls, Ease Pearls, and Dragon Pearls, the more the body will be comforted by the use of formulas that warm the yang and consolidate the body's mingmen (gate of life) "battery."

**Quinn:** A few moments ago you spoke of the prevalence of anxiety in your patients, especially those who fall into this Gu category. In an earlier interview we discussed this in relation to the Fire Spirit approach to prescribing. I wonder if it might be appropriate here to mention that briefly again, since it is so different from the type of thinking that is taught in the standard TCM curricula.

Heiner: The most prominent symptom of shen disturbance in Lyme patients is anxiety and insomnia. Anxiety, from a classical Chinese perspective, represents yang qi rushing out of dantian storage because the body is in a constant state of alarm. To treat this phenomenon, we need to draw this energy back into the box. If a Lyme patient has been suspended in a heightened state of stress for years or even decades, then (from a Western perspective) the system becomes traumatized and the adrenals burnt out. From a Chinese perspective, the reserves in the lower dantian are empty and cold, while the remaining energy is floating at the surface. As the teachings of the Fire Spirit School of Chinese herbalism show, aconite is the best herb both for warming the depleted yang and for drawing it back into the dantian. Caowu is particularly potent for counteracting pathogens, especially when paired with cold herbs like Qingdai and Qinghao (see the design of Dragon Pearls); it is essentially an herb that is both warming and "antibiotic" at the same time. Chuanwu and especially Fuzi are most suitable for recharging the patient's dantian/mingmen battery. The overall process of "recharging" the body's vital fire without tonifying the parasites is a must, especially if our therapeutic goals include a future in which the patient is healthy enough to fight off the remaining pathogens on his/her own.

Two important things to remember when prescribing aconite are: 1) Exclusively use genuine aconite from Jiangyou in Sichuan that has been grown and processed in accordance with traditional specifications (to the best of my knowledge, Classical Pearls is presently the only company that supplies this quality of aconite in the West in powder extract form); 2) For purposes of alchemical stability, it is best to combine aconite with ginger (Shengjiang, Ganjiang, or Paojiang) and licorice (Gancao).<sup>1</sup>

When designing a custom Brain Gu formula, I typically use 12-15 herbs, with an average of 1-3 herbs from each of these categories. I find it important to consistently rotate at least one herb in each category every 4-6 weeks. In this way, you can stay ahead of the adaptive ability of the parasite, and avoid triggering allergic responses from your own body. This procedure can include minor changes, such as changing Guizhi to Rougui, or Fuzi to Chuanwu within a category; or medium changes, which involve changing at least one herb in each category; or major changes, which result in a change of the entire base formula. Dosages vary: generally, I use between 12-18g of powder extracts per day (equivalent to 60-90g of decocted crude herbs per day), but in certain cases of extreme sensitivity I start with a much smaller dosage (2-6g per day), otherwise the super-sensitive types may be overwhelmed by so-called Herxheimer reactions—a common phenomenon in Lyme patients, when the spirochetes are still strong enough to react to a newly introduced treatment.

Most often I combine custom formulas with some of the Classical Pearls family of patents, many of which I created for the specific purpose of treating patients suffering from chronic inflammatory conditions. The herbal powder extract in one CP capsule is equivalent to a decoction of 5g of crude herbs. When only prescribing CP formulas, I typically use about 9-18 capsules per day for the average Lyme patient (most often combining 2-3 different CP formulas), and 2-6 capsules for the super-sensitive types (at the beginning).

The Classical Pearls series of patent remedies I created in recent years has three primary goals, all of which are relevant for the treatment of Lyme disease: 1) to make available classical treatment methods that treat modern diseases at the root, with strict adherence to the highest standards of purity and safety; 2) to uphold the vital principle of "supporting yang" in all formulas—working with the life force rather than against it; 3) to create modular solutions for chronic inflammatory syndromes, which so far have not been readily recognized as a common disorder by the Chinese medicine community. Of the 27 Classical Pearl remedies presently in production, about half can play a potential role for the treatment of *Gu* syndrome in general and Lyme disease in particular.

**Quinn:** Thank you for talking with us today. We appreciate your time. I hope this interview will be of benefit for those who listen to it or read the transcript.

**Heiner:** Thank you for continuously pushing me to clarify issues and concepts that are at the forefront of the medical needs of our time. Maybe in a future interview we can explore the idea you mentioned about the use of moxa in Lyme treatment. We need many tools if we are to treat our *Gu* patients effectively, and moxa is certainly one of them.

#### Appendix I - Herb Categories

#### ANTI-LYME WIND DISPELLING HERBS

Jinyinhua (Lonicera) 金银花

Lianqiao (Forsythia) 连翘

Baizhi (Angelica dahurica) 白芷

Zisu (Perilla) 紫苏叶

Chaihu (Bupleurum) 菜胡

Guizhi (Cinnamon twig) 桂枝

#### BIOFILM

Sanleng (Scirpus) 三棱

Ezhu (Zedoaria) 莪术

Yujin (Curcuma) 郁金

Zelan (Lycopus) 泽兰

Huajiao (Zanthoxylum) 花椒

Dilong (Lumbricus) 地龙

#### ANTI-PARASITIC

Qinghao (Artemisia annua) 青蒿

Guanzhong (Dryopteris) 贯众

Huzhang (Polygonum cuspidatum) 虎杖

Guijianyu (Euonymus alatus) 鬼箭羽

Xuchangqing (Cynanchum) 徐长卿

Changshan (Dichroa) 常山

Miwu (Ligusticum wallichii leaf) 蘼蕪

Dasuan (Garlic) 大蒜

#### ANTI-LYME BLOOD TONICS

Danggui (Angelica sinensis) 当归

Chuanxiong (Ligusticum wallichii root) 川芎

#### ANTI-LYME YIN TONICS

Baihe (Lily) 白合

Heshouwu (Polygonum) 何首烏

Huangjing (Polygonatum root) 黄精

(Bei) Shashen (Glehnia) 沙参

#### AUTO-IMMUNE

Wanggua (Snake gourd) 王瓜

Jicai (Shephard's purse) 薺菜

Kucai (Hare's lettuce) 苦菜

Huangqi (Astragalus) 黄芪

## CALMING HERBS FOR ADRENAL STRESS, MENTAL/EMOTIONAL SYMPTOMS

Danshen (Salvia) 丹参

Suanzaoren (Zizyphus) 酸枣仁

Yejiaoteng (Polygonum stem) 夜交藤

Hehuanpi (Albizzia bark) 合欢皮

Shichangpu (Acorus) 石菖蒲

### WARM YANG, DRAW LIFE ENERGY BACK INTO THE BATTERY

Fuzi (Aconitum carmichaeli, lateral root offshoots) 附子

Chuanwu (Aconitum carmichaeli,mother root) 川島

Caowu (Aconitum kusnezoffi) 草乌

Rougui (Cinnamon bark) 肉桂

Ganjiang (Ginger, dried) 干姜

Paojiang (Ginger, roasted) 炮姜

Shengjiang (Ginger, fresh) 生姜

Wuzhuyu (Evodia) 吴茱萸

#### BODY PAIN

Wujiapi (Acanthopanax) 五加皮

Xuduan (Dipsacus) 续断

Shenjincao (Lycopodium) 伸筋草

## Appendix II - Classical Pearls Herbal Formulas to be Considered for Treatment of Lyme Disease & Other Forms of "Brain Gu"

SYMPTOMS & USES	RECOMMENDED FORMULAS
Standard (Black Gu Label)	Lightning Pearls, Thunder Pearls, Dragon Pearls
Shaoyang involvement	Ease Pearls
Digestive issues, malaise, sluggishness	Earth Pearls
Body Pain	Bamboo Pearls
Headaches and pronounced brain chemistry issues	Gingko Pearls
Food allergies	Cinnamon Pearls
Degenerative brain changes	Evergreen Pearls
Aconite based remedies	Sugar Pearls, Ocean Pearls, Peace Pearls, Vitality Pearls, Moon Pearls

#### **Endnotes**

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The Classical Pearls products have not been evaluated by the Food and Drug Administration. Please note that our products are formulated according to classical Chinese alchemical principles. References to modern disease names in this presentation are intended to convey a general idea of how these classical principles might be applied in a modern clinical context. This should not be understood as a claim on our part that the Classical Pearls products treat, cure, or prevent these conditions.

<sup>&</sup>lt;sup>1</sup> More details about the medicinal use of aconite can be gleaned from another Quinn/Fruehauf interview, entitled "The Importance of Aconite" (*see ClassicalChineseMedicine.org*).