Lyme Disease: A Practitioner’s Experience & Discovery

by

Wendy Snow Fogg,
Herbalist/Educator & Lyme Journeyer

www.mistymeadows.org
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There are those who gain knowledge from researching the work of others, and there are...........the others. This lecture is a presentation of both research and personal experience as well as the stories of people I’ve treated successfully and unsuccessfully for Lyme Disease. While I’m extremely grateful to the researchers, I’m profoundly more grateful to those people, so sick, who bravely come to the plants for healing, and to the plants for joining with us so lovingly, so powerfully, so fully and wholly.
- Lyme Disease affects an estimated 200,000 people per year, in the US alone.
- The Lyme spirochete adapts itself to 12 strains of DNA, and successfully hides in the synovial fluid of the joints, destroying precious collagen and causing symptoms ranging from fever and muscle ache to debilitating neurological symptoms.
- This lecture will offer an overview of my experience and discovery both as a Lyme victim and an herbalist treating hundreds of Lyme patients over the last several years.
We will discuss:

**Lyme Disease:** Background Info

**Co-infections:** Erlichiosis, Babesiosis, Bartonellosis

**Herxheimer:** Dye-off of spirochetes

**Diagnostics:** Elisa, Western Blot, IFA, PCR, Skin Culture

**Treatment:** Antibiotics, Herbal Protocols, Massage Therapy, Acupuncture, Supplements, Reiki, Life Style

**Case Histories:** Five

**Materia Medica**
Some Background on Lyme Disease

- In 1982, the agent responsible for Lyme disease was discovered by Willy Burgdorfer, who isolated spirochetes belonging to the genus *Borrelia* from the mid-guts of ticks infecting deer, other wild animals, and dogs. Spirochetes are spiral-shaped bacteria that have been identified as early as 30,000 BC. The causative organism was named *Borrelia burgdorferi* (Bb), after its discoverer.
The tick on the left is an adult female blacklegged tick, which is red and dark brown. To her right is an adult male blacklegged tick, which is smaller and dark in color. A nymph blacklegged tick is the second from the right, and a blacklegged tick larva is to the far right.

Adult females and nymphs can transmit infections through their bite.
Life Cycle of *Ixodes scapularis* Tick

**Winter**
- Feeds Once
  - (Deer is preferred host)

**Spring**
- Egg
- Larvae
- Nymph
- 3 weeks

**Summer**
- Egg Deposited
- Adults Die
- Feeds Once, 2 days
  - (Mouse is preferred host)

**Fall**
- Adult
- Feeds Once, 3-4 days
  - (Mouse is preferred host)
What Does The Lyme Rash Look Like?

Only 37% of people who contract Lyme Disease will develop the Erythema migrans rash.

The following photos are copied from www.lyme.org.

Erythema migrans – bull's eye appearance
Crusty oblong EM rash behind knee

Multiple Erythema migrans on a child
Angry discolored EM rash

Erythema migrans
Long-thin jagged EM rash

EM Rash
Erythema migrans
Caused by lone star tick
Erythema migrans on dark skin
How Does Lyme Disease Feel?

No symptoms, but tested positive
Bulls eye rash
Hive like rash without bulls eye
Chills
Muscle and joint pain
Tooth pain at roots; tooth discoloration
Sharp stabbing organ pain
Intermittent Nausea with or without Vomiting
Headache with neck pain/stiffness
Agitation / Rage / Depression
Eye issues: floaters, flashing lights, blurring, excessive mucous and crusting
Short term memory loss

Many symptoms, but tested negative
No rash
Fever
Hot flashes w/ or w/out sweating
Migrant pain
Seizure
Mild to severe Bells Palsy
Chronic Fatigue
Sudden Hearing Loss
Parkinsonian type tremors
Language difficulties
Attention deficit
Migrant Itching, “crawly” feeling sensations
According to the Western Medical Model:

- Most cases of chronic Lyme disease require an extended course of antibiotic therapy to achieve symptomatic relief. The return of symptoms and evidence of the continued presence of *Borrelia burgdorferi* indicates the need for further treatment. The very real consequences of untreated chronic persistent Lyme infection far outweigh the potential consequences of long-term antibiotic therapy.
• Many patients with chronic Lyme disease require prolonged treatment until the patient is symptom-free.

• Relapses occur and retreatment may be required.

• There are no tests currently available to prove that the organism is eradicated or that the patient with chronic Lyme disease is cured.
Like syphilis in the 19th century, Lyme disease has been called the great imitator and should be considered in the differential diagnosis of rheumatologic and neurologic conditions, as well as chronic fatigue syndrome, fibromyalgia, somatization disorder (chronic physical symptoms with no medical diagnosis, caused by psychological problems) and any difficult-to-diagnose multi-system illness.
Typical Misdiagnoses

Flu, Spider Bite, Allergic Hives,
Fibromyalgia, Multiple Sclerosis,
Hypochondria, Adolescent belligerence
Depression, Neurosis
Lupus
Other autoimmune & neurodegenerative
diseases (Alzheimer’s & Dementia)
Coinfections of Lyme Disease

**Erlichiosis:**

The general name used to describe several bacterial diseases that affect animals and humans. These diseases are caused by the organisms in the genus *Ehrlichia*. Worldwide, there are currently seven ehrlichial species that are known to cause disease in humans: *E. canis*, *E. chaffeensis*, *E. equi*, *E. phagocytophila*, *E. risticii*, *E. ewingii*, and *E. sennetsu*. 
How do people get ehrlichiosis?

In the United States, ehrlichiae are transmitted by the bite of an infected tick. The lone star tick (*Amblyomma americanum*), the blacklegged tick (*Ixodes scapularis*), and the western blacklegged tick (*Ixodes pacificus*) are known vectors of ehrlichiosis in the United States. *Ixodes ricinus* is the primary vector in Europe.
Manifestations of Erlichiosis usually begin 5-14 days after the tick bite.

Patients with Erlichiosis usually present with severe headache, myalgias, and fever. Shaking chills are often present.

Nausea and vomiting are common. Abdominal pain is uncommon and is typically mild.

Typical Medical Treatment: Doxycycline
Babesiosis

Parasitic infection caused by protozoa of the genus *Babesia* and transmitted through the bite of the *Ixodes* tick, the same vector responsible for transmission of Lyme disease.

While most cases are tick-borne, transfusion and transplacental transmission have been reported.

The disease most severely affects patients who are elderly, immunocompromised, or asplenic.

Healthy people are typically A-symptomatic
Symptoms

Generalized weakness
Fatigue
Depression
Fever
Anorexia and weight loss
CNS - Headache, photophobia, neck stiffness, altered sensorium (ability to experience/interpret one’s environment)
Pulmonary - Cough, shortness of breath
GI - Nausea, vomiting, abdominal pain
Musculoskeletal – Arthralgia (joint pain) and myalgia (muscle pain)
Renal - Dark urine
Patients report a history of travel to an endemic area between the months of May and September. Most do not recall the tick bite. The incubation period is between 1 and 4 weeks. The signs and symptoms mimic malaria and range in severity from asymptomatic to septic shock.
Medical Treatment:

• None if patient is otherwise healthy.

• Immediately start elderly, immunocompromised, or asplenic patients on a combination treatment regimen of intravenous clindamycin and oral quinine or intravenous atovaquone and intravenous azithromycin to avoid acute renal failure.

• Remember— it’s important to have a basic understanding of typical Western Medical Treatments in order to have effective conversations with our patients and their doctors.
Bartonellosis

An infectious disease produced by bacteria of the genus Bartonella. Bartonella species cause diseases such as Carrion’s Disease, Trench fever and Cat Scratch Fever, as well as other recognized diseases including:

Bacillary Angiomatosis - characterized by the proliferation of blood vessels, resulting in them forming tumour-like masses in the skin and other organs.
Peliosis Hepatis - an uncommon vascular condition characterized by randomly distributed multiple blood-filled cavities throughout the liver

Chronic bacteremia – bacteria in the blood

Endocarditis – Inflammation of the inner layer of the heart

Chronic lymphadenopathy – Swollen/enlarged lymph nodes. May stimulate malignant lymphoma.

Neurological disorders
The **Herxheimer reaction** (also known as **Jarisch-Herxheimer** or **Herx**) occurs when large quantities of toxins released into the body as bacteria (typically Spirochetal bacteria) die, due to antibiotic treatment or rapid detoxification.

Typically the death of these bacteria and the associated release of endotoxins occurs faster than the body can remove the toxins via the natural detoxification process performed by the kidneys and liver. It is manifested by fever, chills, headache, myalgia (muscle pain), and exacerbation of skin lesions. Duration in syphilis is normally only a few hours but can be much longer, up to months or years, for other diseases. The intensity of the reaction reflects the intensity of inflammation present.
Diagnostic Testing

Antibody tests are the most commonly used tests to help identify Lyme disease. Antibody testing may also be done on fluid from the spine or from a joint.
It may take up to 2 months after becoming infected before antibodies can be detected in a blood test. Once formed, antibodies usually stay in your system for many years, even after successful treatment of the disease. Finding antibodies to the Lyme disease bacteria does not tell whether you were infected recently or sometime in the past.

There are three types of antibody tests to detect Lyme disease.
Enzyme-linked immunosorbent assay (ELISA)

This common and rapid test to identify Lyme disease antibodies is the most sensitive screening test for Lyme disease. It is also remarkably unreliable.
Western Blot Test

This test also identifies Lyme disease antibodies and can confirm the results of an ELISA or IFA test. It is most often done to detect a chronic Lyme disease infection.
Antibody testing should be done in a two-step process, using either the ELISA or IFA followed by the Western blot test.

ELISA is considered a more reliable and accurate test than IFA, but IFA may be used if ELISA is not available.

The Western blot test (which is a more specific test) should be done in all people who have tested positive or borderline positive (equivocal) in an ELISA or IFA test.
Indirect fluorescent antibody (IFA)

This test also screens for Lyme disease antibodies
Other Tests

• Polymerase chain reaction (PCR) test
  - Detects the genetic material (DNA) of the Lyme disease bacteria. PCR testing may be used to identify a current (active) infection if you have symptoms of Lyme disease that have not gotten better with antibiotic treatment.

  - PCR testing is not done as often as antibody testing because it requires technical skill and expensive equipment.

  - Also, standards have not yet been developed for PCR testing and there is a risk of false-positive test results.
Skin Culture

A skin culture checks a tissue sample for the bacteria that causes Lyme disease. It may take several weeks for test results to come back. For this reason, antibody testing is done more often than a tissue culture.
Because of the spirochete’s ability to hide between cells and in synovial fluid it is able to completely escape the immune system’s “radar”.

No radar = No antibodies
No antibodies = Negative test results

Lyme remains present, laying in wait for the body to become weak through lowered vibration caused primarily by stress.
The **ELISA** screening test is unreliable. The test misses 35% of culture proven Lyme disease (only 65% sensitivity) and is unacceptable as the first step of a two-step screening protocol. By definition, a screening test should have at least 95% sensitivity.
When used as part of a diagnostic evaluation for Lyme disease, the **IgG Western Blot Test** should be performed by a laboratory that reads and reports all of the 10 bands related to *Borrelia burgdorferi*. The CDC requires only 5. IGeneX in Palo Alto, CA is currently the only lab that reads and reports all 10 bands.

Laboratories that use FDA approved kits (for instance, the Mardx Marblot®) are restricted from reporting all of the bands, as they must abide by the rules of the manufacturer. These rules are set up in accordance with the CDC’s surveillance criteria and increase the risk of false-negative results.

The commercial kits may be useful for surveillance purposes, but they offer too little information to be useful in patient management.
Of patients with acute culture-proven Lyme disease, 20–30% remain seronegative on serial Western Blot sampling. Antibody titers also appear to decline over time; thus while the Western Blot may remain positive for months, it may not always be sensitive enough to detect chronic infection with the Lyme spirochete. For “epidemiological purposes” the CDC eliminated from the Western Blot analysis the reading of bands 31 and 34. These bands are so specific to *Borrelia burgdorferi* that they were chosen for vaccine development. Since a vaccine for Lyme disease is currently unavailable, however, a positive 31 or 34 band is highly indicative of *Borrelia burgdorferi* exposure. Yet these bands are not reported in commercial Lyme tests.
There has never been a study demonstrating that 30 days of antibiotic treatment cures chronic Lyme disease. However there is a plethora of documentation in the US and European medical literature demonstrating by histology and culture techniques that short courses of antibiotic treatment fail to eradicate the Lyme spirochete.

- Short treatment courses have resulted in upwards of a 40% relapse rate, especially if treatment is delayed.
So What Do We Do While The Doctors, Scientists & Drug Companies Duke It Out?
We Turn To The Plants
We listen to our patients

We Call On The Plants

We Make The Medicine

We minister in the Wise Woman Way being compassionate teachers and fierce healers on behalf of our patients.
June 1998  Mysterious bug bite on back

- Small red bite, itchy.
- Site becomes inflamed and red area grows daily, covering the entire back within 2 weeks.
- Fever ensues & intensifies
- Friends, chiropractor, osteopath, nurse all presume it’s a spider bite.
- Primary care physician suspects a tick bite and prescribes antibiotic.
- Patient refuses Doxycycline because it’s June and she’s a gardener. Doesn’t want the photosensitivity caused by Doxycycline.
- Doc prescribes 10 days of Augmentin, 500 mg. 2td
- Symptoms subside within 48 hours, completely gone in 7 days.
June 2006

Family Crisis

- Sends Adrenals into High Gear
- Immunity Lowered
- Sudden acute sinus/double ear infection with hearing loss
- Vision blurred, eye floaters & flashing lights on periphery
- Exhaustion

- Primary care nurse practitioner queries patient, “What do YOU think it is?” They agree it’s Lyme and prescribe Augmentin again. This time it takes 10 days before patient sees results, feeling weak and nauseated for the first 5 days of treatment.

- Day 6: Patient begins regimen of Teasel Root Tincture, 3 drops 3td.
Patient begins drinking herb tea *prepared by herbal colleague*, 3 cups daily w/ raw honey:

- Nettle Leaf
- Cats Claw
- Astragalus
- Pau d’Arco
- Cinnamon

Patient is better and back to work in 7 days.
- Continues to drink tea on a regular basis.
- Continues to have ocular and hearing issues, worsening with fatigue and/or stress.
February 2009 – Adds Japanese Knotweed to tea and notices significant improvement in vision. Hearing remains the same.

Begins taking Chronic Tonic (recipe later) and feels vast improvement in cognition, energy, joint pain/inflammation, sleep patterns.

Continues taking this for 3 months.

Stops at end of May

Patient continues to feel well, despite stress and a heavy work load.

Patient continues to take Teasel Root Tincture and drink tea sporadically.
Patient #2: Clyde  Age 67Six occurrences between 2004 - 2009

Emergency room doctor, shown this rash, diagnosed it as “some sort of insect bite, maybe allergic hives, but definitely NOT Lyme Disease”.

Primary Care Physician diagnosed Lyme and prescribed Doxycycline; he also filed a complaint with the hospital.

In conjunction with 3 weeks of antibiotic therapy, Patient took Teasel Root Tincture, 3 drops 3td for 6 weeks with each occurrence.

Lyme Arthritis and digestive issues were relieved with Teasel Root.
June 2008

Diagnosed with Coronary Artery Disease – No Cardiac Event Triple Bypass Surgery.

Initial symptoms: Numbness in hands/arms
Tingling in jaw
Agitation/Anxiety

February 2009
Tick Bite w/ Classic Bulls Eye Rash
Doxycycline – 3 weeks

March 2009
Begins herbal regimen:
Chronic Tonic, 1 TBS w/ breakfast/dinner
Lyme Prevention Compound: ¼ tsp. daily
Patient spends considerable time in forest throughout the Spring, with no more bites.

**June 2009** – Tick bite with classic rash. Questioning reveals patient stopped taking Lyme Prevention Compound two weeks prior to bite. Three more weeks of antibiotic therapy – Amoxicillin 500 mg. 2td – causes digestive distress and elevated blood pressure.

Patient vows to take Lyme Prevention Compound faithfully from now on.
Patient #3: Jayne, Age 53  
Teaches 1st grade; may have to give it up due to Lyme Disease

Initial Consult: 11/08

Lyme diagnosis 2005
Patient believes she had it 18 years before diagnosis

Symptoms
  - Constant pain
    - Joints, low back, upper legs
  - Fatigue
  - Brain Fog (meds help)
  - Head, shoulders twitch
  - Extreme highs/lows
• **Meds:**
  • Celexa – 3 yrs
  • Hydrochloroquinine 200 mg  2td
  • Vit. D  50IU  once weekly
  • Provigil  200 mg daily
  • Naproxen 500 mg. 2td
  • Levaquin  500 mg daily
  • Amoxicillin  875 mg.  6td
  • Citalopram  40 mg. daily
  • Azmacort  75 mcg  aer abb 2 puffs 3-4 td
  • MaxairAutoh  200 mcg aer 3m Pharm  1-2 puffs every 4-6 hrs.
• **Treatment:**

• **Lyme Defense Tea:**

  • 4 Cats Claw
  • 4 Astragalus
  • 3 Eleuthero
  • 3 Japanese Knotweed
  • 2 Nettle Leaf
  • 2 Cinnamon Chips
  • 2 St. Johnswort
  • 1 Pau D’Arco
  • 1 Sweet Annie
  • 1 White Willow Bark
  • 2 Red Root
  • Plus 3 Milky Oats

• 1 TBS. to 32 oz. water. Overnight infusion. Drink throughout the day. Repeat for 6 weeks, minimum.
Treatment (cont’d)

- Teasel Root Tincture 1:1 in 80 proof Vodka
- Dose: 3 drops 3td, 6 weeks minimum.

Additional Recommendations:
- Whole foods diet
- No processed foods or carbonated beverages
- Hot baths nightly with sea salt, olive oil and 1 drop essential oil of Artemisia annua (Sweet Annie)
- Sauna if possible – 3 times weekly
Follow up visit: February 2009

Patient Reports Improvements:

- **50%** Headaches – fewer & less intense
- **50%** Brain fog much improved
- **50%** Joint pain, now only intermittent
- **10%** Back pain less but still persistent
  - Recommended chiropractic evaluation
- **5-10%** Shoulder twitching
- **5%** Head twitching
• Highs & Lows are evening out nicely
• Patient feels “generally happier”
• Patient reports cooking more due to more energy & better frame of mind
• Sleeping well

• Treatment changes:
• Lyme Defense Tea – reduce to 16 oz. daily
• Add CoQ10 – 100 mg. in morning
• Add Chronic Tonic (recipe at end) – 1 TBS w/ breakfast and dinner
• Add Lyme Prevention Compound (recipe at end) – ¼ tsp. morning and night.
July 2009

- Patient continues to improve on all levels
- No more tick bites
- Looking forward to her new class of 6 year olds!
Patient #4: Heather, Age 20

- Walk-in customer – no full consultation
- Tested negative for Lyme Disease but believes she has it.
- Presenting symptoms:
  - Doesn’t recall tick bite – no rash
  - 20 lb. weight gain in 4 months
  - Severe muscle & joint pain
  - Unable to exercise
  - Exhaustion
  - Brain fog with depression
• **Treatment**

• **Recommended**
  - Teasel Root Tincture – 3 drops 3td
  - Lyme Defense Tea – 32 oz. daily for 6 weeks minimum
  - Chronic Tonic – 1 TBS with breakfast and dinner
  - Whole foods diet
  - Eliminate all processed foods
  - Hot baths nightly with sea salt, olive oil and 1 drop essential oil of Artemisia annua (Sweet Annie)
  - Sauna if possible – 3 times weekly
Results:

Saw her (attorney) dad walking the dog and asked about her.

Dad reports she’s doing very well, although he’s not convinced the herbs had anything to do with it.

Chiropractor contacted me to let me know that we’ve managed to help yet another Lyme victim!

And that’s what really matters
Case #5: Victoria, age 12

Diagnosed 8/13/06

Symptoms:
- Severe CNS involvement
- Severe neurological dysfunction
- Seizures every 5 minutes; eyes rolling to back of head
- Non-verbal, but trying desperately to communicate
- Crying
- Flailing arms
- Incontinence
- Feeding Tube
- Thrush in mouth
• Medications:
  
  • Ceftriaxone  Broad spectrum antibiotic
  
  • Mepron  Antiparasitic
  
  • Diflucan  Antifungal
    Can cause seizures, adrenal suppression
- When I first met Victoria at our free clinic, I presumed she had Cerebral Palsy. I was wrong.

- Her mother reported that Boston Children’s Hospital had diagnosed her as ‘belligerent’. She was restrained and force fed for 3 weeks. She nearly died.

- Victoria’s mom, despite warnings and threats from the medical staff, checked Victoria out and brought her home, believing that if her child was to die, it would be at home with her loving family.
Visits to many medical doctors as well as naturopaths in the area offered no answers. So she came to our clinic.

After a lengthy intake, feeling quite helpless myself, I asked her mom, “Tell me what Victoria looks like when she’s well”.

Six months earlier, Victoria was a straight “A” student and captain of her cheerleading squad.

This was one of those times when the herbalist has to get very focused and call for help............from Spirit......from the plant Spirits........from the patient’s higher self...............and from our own higher selves.
• Treatment:

• Mouth Rinse:
  • 1 Black Walnut Hulls
  • 1 Calendula
  • ½ Peppermint
  
  • Infuse and rinse with 1 tsp. every few hours.
  • Victoria’s mom did this with a swab since the child would choke on the liquid otherwise.
- **Teasel Root Tincture**
  - 5 drops every 4 hours
  - Into feeding tube

- **Extract Compound**
  - Goldenseal/Blue Vervain
  - 10 drops every 4 hours

- **Tea Blend** – 2 oz. into feeding tube every 6 hours
  - 2 Pau D’Arco
  - 2 Cat’s Claw
  - 2 Astragalus
  - 3 St. Johnswort
  - ½ Cinnamon Chips
  - ½ Agrimony
  - 1 Calendula
  - ½ Gotu Kola
- December 2006

- Victoria’s mom continues to give her teasel root tincture and the goldenseal/blue vervain compound.

- She claims to see improvement, but won’t come in for a second consultation. I did not speak with her personally.

- August 2009

- I called Victoria’s mom today........waiting for a call back.
# Materia Medica for Lyme Disease

<table>
<thead>
<tr>
<th>Plant</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agrimony</strong></td>
<td>Astringent, Nervine Tonic</td>
</tr>
<tr>
<td><em>Agrimonia eupatoria</em></td>
<td>“Deer in the Headlights” Matt Wood</td>
</tr>
<tr>
<td><strong>Andrographis</strong></td>
<td>Analgesic, anti-inflammatory, anti-spirochetal, antimalarial, vermicideal,</td>
</tr>
<tr>
<td><em>Andrographis paniculata</em></td>
<td>hepatoprotective, cardio protective. Unpalatably bitter – use extract only.</td>
</tr>
<tr>
<td><strong>Astragalus</strong></td>
<td>Immunomodulator, adaptogen, anti-spirochetal, specific for immune atrophy;</td>
</tr>
<tr>
<td><em>Astragalus membranaceious</em></td>
<td>cardio protective; supports spleen &amp; thymus; may exacerbate Herxheimer</td>
</tr>
<tr>
<td></td>
<td>Response.</td>
</tr>
<tr>
<td><strong>Cats Claw</strong></td>
<td>Anti-inflammatory, Immune potentialator and stimulant, analgesic. Enhances cognition &amp; “wakes” CNS</td>
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<td>--------------------------------------------------------------------------------------------------</td>
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<tr>
<td><em>Uncaria tomentosa,</em></td>
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<tr>
<td><em>U. guianensis</em></td>
<td></td>
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<tr>
<td><strong>Cinnamon Chips</strong></td>
<td>Warming, soothing, antibacterial antifungal, analgesic</td>
</tr>
<tr>
<td><em>Cinnamomum cassia</em></td>
<td></td>
</tr>
<tr>
<td><strong>Eleuthero</strong></td>
<td>Adaptogen, Immune</td>
</tr>
<tr>
<td><em>Eleutherococcus senticosus</em></td>
<td>tonic/potentiatior, revitalizes depleted constitution</td>
</tr>
<tr>
<td><strong>Japanese Knotweed Root</strong></td>
<td>Antibacterial, antiviral, antispirochetal, CNS relaxant/protectant, immuno-stimulant, anti-inflammatory. + MORE!</td>
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<td>---------------------------</td>
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<tr>
<td><em>Polygonum cuspidatum</em></td>
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<tr>
<td><strong>Neem Leaf</strong></td>
<td>Similar properties as Andrographis, but more palatable, available and affordable.</td>
</tr>
<tr>
<td><em>Azadirachta indica</em></td>
<td></td>
</tr>
<tr>
<td><strong>Nettle Leaf</strong></td>
<td>Nervine tonic, nutritive, blood tonic anti-rheumatic, splenic.</td>
</tr>
<tr>
<td><em>Urtica dioica</em></td>
<td></td>
</tr>
<tr>
<td>Plant Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Pau D’Arco Bark</strong></td>
<td><em>Tabeuia heptaphylla</em> Alterative, analgesic, antibacterial, antifungal</td>
</tr>
<tr>
<td></td>
<td>anti-inflammatory, antimicrobial, bitter tonic, parasiticide, warming antibiotic.</td>
</tr>
<tr>
<td><strong>Sarsaparilla Root</strong></td>
<td><em>Smilax glabra, spp.</em> Blood cleanser; indigenous use as</td>
</tr>
<tr>
<td></td>
<td>antisyphilitic; hepato/brain protective, anti-rheumatic, general tonic.</td>
</tr>
<tr>
<td><strong>Red Root Bark</strong></td>
<td><em>Ceanothus americanus</em> Specific for Babesiosis; Lymph stimulant/tonic;</td>
</tr>
<tr>
<td></td>
<td>Liver/spleen anti-inflammatory, strong blood coagulant;</td>
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<tr>
<td>Herb</td>
<td>Description</td>
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<tr>
<td>Stephania Root (Stephania Tetrandra)</td>
<td>Anti-inflammatory, antiarthritis, analgesic, antibacterial, antiparasitic. Specific in ocularborelliosis, i.e. blurry vision, spasms and inflammation. Also Lyme related arthritis, brain fog, late stage infections of nervous system, joints &amp; skin; immunomodulator, protects joints and skin.</td>
</tr>
<tr>
<td>Sweet Annie (Artemisia annua)</td>
<td>Specific in Babesiosis; Anti-Malarial, can reduce Herx response; Antiparasitic.</td>
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Teasel Root
*Dipsacus sylvestris*
Relieves many symptoms of Lyme Disease. *Do not confuse with Dipsacus japonica.* Specific where there is great muscle pain & inflammation, as with Polymyalgia Rheumatica. Many report being “cured” using only Teasel Root Tincture.

Willow Bark (All species)
*Salix (spp)*
Anti-rheumatic, anti-pyretic: arrests inflammatory processes to reduce fever. Analgesic: joints, muscles; restores collagen, useful in neuralgia.
# Recipes for Herbal Lyme Protocols

## Lyme Defense Tea

<table>
<thead>
<tr>
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<td></td>
</tr>
<tr>
<td>1 White Willow Bark</td>
<td></td>
</tr>
<tr>
<td>2 Red Root</td>
<td></td>
</tr>
</tbody>
</table>

1 TBS. to 32 oz. water. Overnight infusion. Drink throughout the day. Repeat for 6 weeks, minimum.
Chronic Tonic

1 Part = $\frac{1}{4}$ C.

<table>
<thead>
<tr>
<th>Part</th>
<th>Herb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>St. Johnswort</td>
</tr>
<tr>
<td>2</td>
<td>Echinacea Root</td>
</tr>
<tr>
<td>2</td>
<td>Eleuthero</td>
</tr>
<tr>
<td>2</td>
<td>Red Root</td>
</tr>
<tr>
<td>$\frac{1}{4}$</td>
<td>Thyme Leaf</td>
</tr>
<tr>
<td>2</td>
<td>Japanese Knotweed Root</td>
</tr>
<tr>
<td>1</td>
<td>Sweet Annie</td>
</tr>
<tr>
<td>4</td>
<td>Cats Claw</td>
</tr>
<tr>
<td>2</td>
<td>Teasel Root</td>
</tr>
<tr>
<td>$\frac{1}{2}$</td>
<td>Neem Leaf</td>
</tr>
<tr>
<td>$\frac{1}{4}$</td>
<td>Oregano</td>
</tr>
</tbody>
</table>

Use 1 C. mixture per gallon water. Decoct to 50%/64 oz./2 quarts. Add 3 cups raw Honey and 1 cup Brandy. Recipe makes 3 quarts/96 oz.
Lyme Prevention Compound

1 Part = 1 ½ Cups. Recipe makes 1 Gallon.

1 Part Astragalus
1 Part Cats Claw
¼ Part Neem
¼ Part Thyme

Macerate for 4-6 weeks, then add
1 tsp. Garlic Flower Essence STOCK per quart of tincture.

Note: Customers & Patients report finding dead ticks on themselves and their animals, and ticks crawling but not biting on humans.
Let Your Food Be Your Medicine

And Your Medicine Be Your Food

Please.............
References:

- My patients, to whom I am forever grateful
- ILADS (International Lyme and Associated Diseases Society) website: www.ILADS.org
- National Center for Infections Diseases
- Turn The Corner Foundation website: www.turnthecorner.org
- Lyme Disease Foundation: www.lyme.org
- Book of Herbal Wisdom Matthew Wood
- David Winston 2009
- Healing Lyme Stephen Buhner 2005
- Lyme Disease Alan G. Barbour M.D. 1996
- Neem National Research Council 1993
For more information on classes & workshops
Offered by Wendy Snow Fogg

See us online at
www.mistymeadows.org

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