

HERBAL MEDICINE

## The Wen Bing Theory Effective For Erlichia

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Erlichia is a tick-borne rickettsial disease that was first described in 1987. It is considered to be a new and rare disease. I live in North Central Florida and am aware of nine cases in my area. Two of these cases were so severe they required intensive care and one person was on a ventilator for several days.

Erlichia is described as an obligate intracellular parasite. The infection is passed by the bite of either a lone star tick or a brown dog tick and these ticks also carry other diseases such as Rocky Mountain spotted fever, which is similar to Erlichia but more deadly, and Babeosis. Lyme's disease, which is well known, is not considered to be common in this area of the country.

The Erlichia rickettsial organism enters the leukocyte, a white blood cell, and replicates. After a period of about two weeks, it begins to destroy the host cell and enters the blood stream where it, with its toxins, begins to initiate symptoms as it seeks out the next white blood cell to replicate in. This process causes a drop in the white blood cells numbers which can be confusing on lab work due to the fact that most infections cause a rise in white blood cell counts. Other common lab findings include a drop in platelets and a rise in liver enzymes due to liver inflammation.

Common symptoms include a sudden onset of a high fever and chills, joint and muscular pain, headache, malaise, enlargement of the liver, and loss of appetite. More severe stages include respiratory failure, kidney failure, cardiac damage, circulatory collapse, coma and death. Only about 20 percent of patients experience the eruption of a rash. The rash is flat, red, small spots found on the chest, abdomen, and back which appears five days after the first fever.

Doxycycline is the drug of choice and is a bacteriostatic, meaning that it inhibits the organism from replication but does not kill the organism. This is important due to the endotoxin produced by the rickettsia which is dangerous if released in large amounts suddenly. The endotoxin initiates herkheimer reactions which can cause respiratory and renal failure. I am aware of one case locally which was mismanaged and the incorrect antibiotic almost killed the patient due to this reaction.

I wish to report on two cases of erlichia, which were treated with a combination of Western and Chinese medicine. One case occurred in a 60-year-old man in generally good health, with a complete recovery within two months. The other case was in a 40-year-old woman with chronic asthma, a kidney disorder which caused chronic polyuria to the point of dehydration, and severe allergies. This second case went unresolved regarding recovery of her prior health for nine years after the infection.

Case 1: 60-year-old male in generally good health, no medications, osteoarthritis in L hip. He was bitten by several ticks two to four weeks prior to the onset in early June 2008.

*Wei* Level: Onset was sudden and he presented with fevers up to 102, severe chills, headache described as whole head very tight, severe body pain especially in the low back, loss of appetite, and

severe drenching sweats as fevers broke. These sweats were followed by rigors and chills. He was very thirsty and did not urinate after the fever began for almost 24 hours. His tongue was red with a thin yellow coat. His pulse was floating and rapid averaging 90 beats-per-minute (*Wei* level). He was medicated within 24 hours with the drug of choice Doxycycline 100 mg. by mouth twice per day, he also took aspirin 365 mg. every four to six hours, and *Yin chow che tu pian* four press tablets every six hours to clear toxins.

Qi Level: He ran higher fevers the second day up to 103 with similar symptoms but also had increased heart rate averaging 100 beats per minute. He had a flooding excess wave form(qi level full interior heat). He experienced eye pain, and his teeth ached as well as generalized pain especially in the back. He was urinating once every 24 hours and it was dark and scant even though he was very thirsty and pushing large amounts of fluids by mouth. His presentation was Wei depth for the first 24 hours and it gradually became more qi depth with the increasing fever. The chills remained severe throughout the disease.

*Ying* Level verging on dipping into pericardium: On the third day his fever peaked at 104.5 and he developed projectile vomiting for a brief time. On that day the pulse changed from flooding excess to tense, thin, and choppy (*qi* stagnation, blood and *yin* deficiency, blood stagnation, toxicity) as he became more dehydrated. His emotional state changed to labile with episodes of crying and expressions of fear. His breathing became labored. The sweating became pearl-like and profuse. His urine was very scant and dark. He drank large amounts of water and was given electrolytes in sports drink form. This was the last day of high fever which broke about 7 p.m. His tongue was crimson and without a coat.

The next day he saw an M.D. who did blood work and determined that the leukocyte (WBC) was low, the liver enzymes were elevated, and there was a low normal platelet count. He was mildly dehydrated and very weak. He still had no appetite and had low back pain severe enough to use crutches.

Near collapse of *Yang*: That evening he became very weak, had more episodes of severe drenching sweats running off like pearls. His pulse became feeble absent (*qi*- deficiency severe), his complexion was grey, his limbs were cold. He was given large doses of Ginseng and *Sheng mai san*. Moxa on salt was applied to Ren 8 and St 36 was treated with moxa with improvement over three hours. He continued to have lower fevers of 100 to 101, with chills and sweats over the next three weeks which gradually improved.

Damp heat in liver gall bladder during *Ying* Level: The fifth the day of the disease he was mildly jaundiced and had an enlarged liver. He received *Zhu Dan Pian* to reduce the jaundice which resolved within 24 hours. He also developed a rash of fine red flat lesions over his chest, flank, abdomen and back, which did not itch and is considered diagnostic for erlichia. His pulse was tense, tight, thin and pounding (*qi*, stagnation, blood deficiency, *yin* deficiency, heat). His tongue was red with peeling in the center and yellow on the sides.

*Xiao Yang* during resolution: Over the next two weeks he exhibited reduced appetite, irritability, dizziness which could be mild or severe, bitter taste, chest oppression, rib discomfort and a tense pulse.(*Qi* stagnation) He had low grade fevers, fatigue and sweated profusely several times per day. His chills were milder but continued to follow the sweating and would lead to another fever of 100-101. He was still on Doxycycline and also took *Xiao Chai Hou San*. He stopped having fever about a month after the onset and recovered his energy within a month after that. His total weight loss was

15 lbs. of which he regained 5 lbs. at the end of two months.

The second case occurred nine years ago in a woman who was 45-years-old and had a lifelong disorder which included asthma and polyuria to the point of dehydration and hospitalization a number of times. She was aware of taking a tick off her leg but was not sure if it had actually bitten her. She came down with an upper respiratory like febrile illness within two weeks which she often experienced and did not think it was serious. After about two weeks of slowly increasingly serious respiratory symptoms she awoke in the night with respiratory distress and called 911. The ambulance arrived to find her in severe respiratory distress and a very elevated pulse and blood pressure. She was admitted to Shands Teaching Hospital and an infectious disease. A doctor was consulted who suspected erlichia and began Doxycycline immediately. She deteriorated and was placed on a ventilator for about nine days. She has no memory of the acute stage beyond that point. After two weeks in the hospital she was discharged on antibiotics for a month.

*Yang Qi* deficiency of lung, spleen, kidney: I began treating her in the spring of 2008. Her recovery was still incomplete after nine years and she suffered from severe asthma symptoms with difficulty inhaling, wheezing, and a tight, congested, and painful chest. She had almost continuous spontaneous sweating, poor appetite, incomplete sticky BMs, fatigue, was very thin to the point of emaciation, we could count every rib. She had frequent pale profuse urination day and night. There was also weakness to the point of not being able to walk a block, allergic symptoms, poor digestion, inability to gain lost weight, very weak voice, needed to sleep 12-14 hours per day and had severe intolerance to cold and damp conditions. Her tongue was pale, swollen, slightly blue and wet. Her pulse was extremely thin and feeble (severe *qi* blood deficiency). She had sensitivity to many foods and herbs and was very limited as to what she could accomplish on a daily basis. An evening at a poetry reading could exhaust her all week. I began treating her twice a week with large amounts of moxa on Ren 4, Ren 6, St 36, Bl 43 and ming men. I needled Ren 17, Ren 12, Bl 13, Bl 23, Sp3, K7, Lu 9, Lu 6, and Ding chuan. This combination was used to tonify kidney, lung and spleen *qi* and *Yang*, stop sweating , inhibit frequent urination, improve digestion, and resolve wheezing.

Resolving *Yang Qi* deficiency, emergence of retained pathogen injuring *Yin*: The first sign of this pattern began soon after treatment. Her spontaneous sweating improved, the frequency of urination decreased. She became slightly more comfortable in cool weather, her energy and digestion improved slightly. She began to have more awareness of a parched hot sensation in her chest which had been there since the acute illness. Her tongue changed dramatically at this time. It became red and peeled from the tip to the root along the midline. She developed a huge number of fine red dots in the entire front third of the tongue and the crack filled with a thick dark yellow coat. Her pulse acquired a thin tight line above the *qi* depth (*Yin* deficiency liver wind) and was tense (*qi* stagnation) beneath. The wave form became hesitant (heart *Yin* deficiency, obsessive thinking).

I continued to use the same points as above with slight modifications such as St 15, St 40, Sp6, St 5, St 9, CV 22, and CV 23 to exteriorize *Wei*, transform phlegm, move stagnant *qi* in the chest and nourish *Yin*. I also started her on a dried decoction of:

Shan Yao	Dioscoria	12gm
Jie Ni Jin	Galli endothelium	15gm

Tu Si Zi	Cuscuta	9gm
Sheng Jiang	Ginger	3gm
Dong Chong Xai Cao	Cordycepts	12gm
Dang Gui	Angelica Sinensis	9gm
Bu Gu Zi	Psorelea	9gm
Tian Men Dong	Asparagus	6gm

She also used *Bao He Wan* PRN for symptoms of food stagnation. She stabilized for about three months with bi-weekly treatments with the above protocol.

Exteriorization of the retained pathogen: At the height of summer, I employed the theory of treating a disease which worsens in the winter by using moxa. I began using large amounts of moxa on the following points; BI 12, BL 13, Bl 14, Bl 41, Bl 42, BL 43, Bl 44, BL 23, Ming Men, CV 4, CV 6, St 36. I also added Zi Su Perillia leaf 6 gm to the formula to vent the pathogen. She began to experience episodes of low fevers 99-101, followed by the eruption of a fine red non-itchy to occasionally itchy rash. The eruptions would fade within a week and occurred on the chest upper abdomen, upper back, flanks, and later the neck area. She stated that after the eruptions her chest would feel less painfully tight and parched. She did not feel the fevers were of acute origin. They did not lead to common respiratory symptoms, instead they would resolve within a day and she would feel stronger. During these weeks she gained weight, strength, had decreasing episodes of wheezing, stopped having frequent urination, and had fewer episodes of sweating. The exteriorization is still ongoing. The last episode of rash was the largest yet and her tongue is now having fewer red dots emerge. The coat is now intact, the tongue color is more harmonious and a light red. Her pulse has more substance (increasing *qi* and blood) and the wave form is normal (Normal). I plan to continue to support her exteriorization but as fall has arrived plan to focus more on her nourishment and rest through the winter months.

In conclusion, I want to emphasize the good results which can be gained with a combination of Chinese Medicine and Western Medicine, I think both cases required the Doxycycline and certainly the second case required emergency measures. Viewing this disease through the lens of Warm Disease Theory or *Wen Bing* was very helpful to me. I was able to use the theory to recognize and treat the levels from the acute stage to the long held pathogenic heat toxin exteriorization phase.

Only 20 percent of erlichia cases resolve with a rash. Perhaps the expression of a rash which is a long held standard of Chinese treatment is more important than is being recognized by Western physicians. The concept of a toxin involved with this disease is from the Western medicinal perspective and Chinese medicine has the tools to encourage its resolution so patients can recover. The concept of a lingering pathogen in the case of chronic asthma is also recognized in the cases of mycoplasma which can cause "walking pneumonia " being cultured from the lungs of patients with resistant asthma.

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