Treating the Untreatable#4

Tuberculosis (TB) is an infectious bacterial disease of the Mycobacterium family. It falls second to HIV/AIDS as the greatest killer worldwide from a single agent even though the death rate dropped 45% in comparison to 2012 statistics. In 2012, 8.6 million fell ill and 1.3 million died from the infection.

The State of Hawaii continues to report one of the highest annual numbers of new reported cases, nearly 3 times the national average! In fact, TB accounts for 71% of the state's mortality! Why Hawaii? The Hawaii State Department of Health blames immigration, especially from Asia and the Pacific islands. In 2009, Hawaii recorded 117 new cases; however 100 of the 117 new TB cases were from non US born citizens! Persons born in the Philippines accounted for 62% of the cases, followed by Micronesia.

In the Hawaii and National databases, the major site of infection is pulmonary (85%). 15% were classified as extra pulmonary with the lymphatic system being the most commonly affected area (7%). 3% of the 15% have bone and/or joint involvement.

Of note, Tuberculosis of the bone or joints is also called Pott disease, named after Percival Pott, also called Tuberculosis spondylitis. Back pain is the earliest and most common symptom of Pott disease. Constitutional symptoms include fever and weight loss. Pott disease progresses as a combination of osteomyelitis and arthritis. Progressive bone destruction from abscess formation within the vertebral bodies, most commonly in the thoracic and lumbar spine, leads to progressive kyphosis, followed by spinal cord compression, and neurological deficits. Deformity, motor deficits, advancing to paraplegia, either caused by drug resistance, therapy non-compliance or delayed diagnosis signifies an advanced stage of the disease. Adult males are more likely than females to carry the disease (1.5 to 2 ratio) with the highest ratio in African Americans, Hispanic Americans, Asian Americans, and foreign born.

Into my office, in July of this year, walks with two person assist, a Frankenstein style gait and a hyperkyphotic posture, a beautiful, yet pale and fatigued appearing 35 year old female. She was born in a foreign country, migrated to the continental United States, before setting up residence in Hawaii 5 years ago.

Prior medical history was significant for chronic low back pain made worse with pregnancy, requiring a complete nerve block in order to deliver her children vaginally. In February of 2013, sharp intense shoulder pain awoke her from her sleep. She was unable to extend or abduct her arms from the shoulder joints. Over the course of one year, each joint moving distally swelled to the point she was unable to move them. The swollen joints remained with visible deformity, loss of range of motion, and strength. As frequently as once a week, she complained of difficulty breathing and rapid heart rate. She lost the ability to drive, walk up stairs, even walking in her own home caused pain and excessive fatigue. She preferred to remain in bed, calming the pain with 2 Motrin BID.

June 2014 Lab results revealed significant microcytic, micro chromic anemia. RBC, hemoglobin, hematocrit and Ferritin were all low, iron was within normal limits and her TIBC was elevated. The neutrophil count was a mere 23% of the total WBC. Her PCP prescribed iron supplementation. She was also prescribed methotrexate however; the patient weaned herself off, while simultaneously requesting naturopathic intervention.

In July 2014, she presented to our clinic with a diagnosis of RA and latent TB, pulse of 110, low grade temp: 99.6 F, and normal BP: 105/80. Her weight had decreased from 155 lbs to 123 lbs. She was 5'7". She now stands at 5'5."

I would need to see an MRI to confirm her diagnosis of Pott disease. Clinically, she appears to be a textbook case. Due to the aggressiveness of her disease and the high mortality rate, time was of the essence. Daily IV hydrogen peroxide treatment was recommended. Due to her significant anemia, the dose of hydrogen peroxide remained low. She was placed on an anti-inflammatory, immune boosting diet, and prescribed natural anti- inflammatory supplementation. She refused homeopathic intervention for religious reasons.

After the first day of treatment, she was able to move from sit to stand without assistance. After 13 days she was able to climb three steps with physical assist of one instead of two people. Furthermore, her Motrin dosing decreased in half to one cap BID. She resumed physical therapy which included pool exercises to improve range of motion. Her fever subsided. Her joints were no longer warm to touch, had decreased in size albeit still abnormally large with a few deformed DIPs of the right hand. Treatment decreased to every other day, school was back in session!

Setbacks:

1) Children bringing home viral and bacterial infections, which spread to my patient. Her low grade fever had returned, with increase joint pain and swelling! Due to financial reasons, we settled for continued 3x/ week IV hydrogen peroxide and increased her immune boosting treatment regimen.

2) Just last week, she was taken to ER and admitted for inability to breath and a rapid heart rate. Labs revealed an ESR of 82, CRP, quantitative of 110, D-dimer of 3.1, pro time of 14.1, and a PTT of 37. Platelet count jumped up to 642! She was administered SQ Heparin BID along with IV pain medication, and prednisone. She was discharged three days later, with normal vitals, feeling and walking better than ever and a prescription for oral prednisone starting at 20mg QD titrating off after one week. She was not prescribed a blood thinner.

Hospital records noted "no evidence of active TB." Her ANA remained elevated at 80, further work up was (-) for Lupus. She exhibited a fine speckled pattern consistent with RA, polymyositis, or a possible mixed connective tissue disease.

Goals for moving forward:

I think it is imperative to further work up patient's hypercoagulability. What is her fibrinogen level? Thrombin/Antithrombin, and Fragment 1&2 levels? Is there an underlying hereditary component? Family history is (+) for blood clot in the brain resulting in death. Another point to consider is maybe it is time to change to IV Vitamin C to help decrease inflammation and improve collagen, while continuing to focus on anti-microbial action? The introduction of immune regulating foods, herbs, and supplements will also be of great benefit.

Discussion: It is not uncommon for a patient with a chronic disease to acquire hyperviscocity of the blood. To be preventative blood work up should include the hypercoagulability factors. I had ordered these but her PCP had not followed through in fear of being denied insurance coverage. The Esoterix test has several panels that can be used to gather information on the etiology of the hypercoagulability. There is an immune panel called the ISAC and the hereditary panel called the HTRP which will help

discern the etiology and guide the course of treatment. To be preventative against a catastrophic event such as a pulmonary embolism, the patient was placed on Bolouke, 1 cap BID. Also changing her treatment protocol to IV HDVC dramatically reduced inflammation, repaired collagen, while continuing to be anti-microbial. She began to have more stamina. She was once again able to participate in the lives and raising of her children and in family functions. Her treatment schedule can now safely be reduced to once a week.

This case is a great example of the powers of natural medicine and the importance of treating the whole person.