

The Immune System Stuck on Repeat: Chronic Inflammatory Response Syndrome (CIRS)

24% of the population has a genetic predisposition to Chronic Inflammatory Response Syndrome. As a result of exposure to certain bacteria, molds, fungi, dinoflagellites and algae, one may be susceptible to biotoxins. If triggered by an exposure to biotoxins, this syndrome may be experienced as a range of symptoms such as fatigue, weakness, brain fog, headaches, dizziness, muscle pain or visual disturbances.

Ritchie Shoemaker, a primary care physician from Maryland, is the pioneer of research, diagnosis and treatment of CIRS. In 1997, he observed an outbreak of illness in the Chesapeake Bay area due to the biotoxin released by *Pfiesteria*, a dinoflagellate. This experience fueled his research into water-damaged buildings and sick building syndrome, which is quite relevant to New England. Our damp climate provides a haven for mold growth. While certain folks may experience short-lived symptoms from exposure to mold or seasonal allergies, those with a genetic predisposition may activate their immune system as a result of mold exposure and from then on experience a chronic non-specific illness, even after mold remediation. If you are wondering if there is mold in your house, you may visit www.ESML.com to purchase an ERMI, Environmental Relative Moldiness Index, test kit (*MTK-ERMI-5D*), which is the best test for indoor mold growth.

Dr. Shoemaker compiled research connecting biomarkers to susceptibility to illness as a result of exposure to biotoxins, like mold toxins. Blood testing may be done to identify a person's HLA DRB and DQ haplotype, which reveals whether or not there is a genetic predisposition to CIRS. HLAs (Human Leukocyte Antigens) are gene markers found on the surface of cells and present toxins to the immune system. CIRS is caused by the failure of HLAs to present toxins to the immune system, whereas an ineffective immune response is created and inflammation persists. One part of the immune system called the innate immune system continues to be activated – *stuck on repeat* - whereas the adaptive immune system never responds. As a result, fatigue, weakness, brain fog, headache, dizziness, muscle pain or visual disturbances may develop and persist. There are also other blood tests done to look more deeply into brain, immune, vascular and endocrine function. Most of these tests are best done at LabCorp.

Another test that may provide a window into diagnosing chronic inflammatory response syndrome is called a visual contrast sensitivity test. Unlike visual acuity which measures clearness of vision, visual contrast measures the difference in luminance (bright and dim) between two images. Research has shown that neurotoxins can create visual contrast sensitivity deficits. In order to test visual contrast sensitivity, set up a free account at www.survivingmold.com for one free test.

Dr. Shoemaker has also identified a specific HLA haplotype that prevents the immune system from doing its job after exposure to Lyme disease. During treatment for Lyme disease the bacteria die-off creates toxins that are detoxed from the body through the liver, lymph, kidneys and skin. Those with a specific HLA haplotype may have a harsh unrecoverable (Herxheimer) reaction as a result of exposure to Lyme biotoxins – one part of the immune system will be stuck on repeat – and generalized symptoms from inflammation will prevail. Identifying CIRS can be critical to treating some cases of Lyme disease.

Treatment of CIRS must focus on binding to the biotoxins and tonifying detoxification organs in order to eliminate them from the system. First, one must remove themselves from exposure. For example, they must leave the house and its contents that have mold. Next, high dose cholestyramine or bentonite clay must be used to bind to the biotoxins. In addition, there are herbal formulas and amino acids used to support the liver, lymph and kidneys. The following may also improve detoxification: 2-3 liters of water daily, castor oil packs over the liver, lymph massage, Epsom salt baths and sauna (when prescribed).

Dr. Shoemaker has made an incredible contribution to medicine, which offers the potential for powerful healing relevant to this damp climate where mold and ticks abound.