FACT OR FICTION: THE TRUTH ABOUT LYME DISEASE CO-INFECTION  
Dr. Harriet Kotsoris on five common misunderstandings about Lyme co-infections

Greenwich, CT, May 2010 - An early spring with summery temperatures lures more people into the great outdoors. Yet the downside to this beautiful weather is that it can also mean a heavy tick season. According to the Centers for Disease Control (CDC), there were 35,198 reported cases of Lyme disease in 2008, a 28% increase over the 2007 statistics. With a spike in Lyme disease cases there is also a spike in Lyme co-infection. Ticks that transmit the bacteria that cause Lyme also carry numerous other pathogens that cause infection and can complicate treatment, compromise the immune system, and result in a more devastating illness. Tragically, some of these co-infections can be fatal.

“Patients infected with Lyme disease are at risk of developing one or more co-infections, tick-borne illnesses that can worsen the severity and/or the duration of Lyme symptoms,” says Dr. Harriet Kotsoris, Medical Director at Time for Lyme, a Greenwich, CT-based Lyme disease research, advocacy and education group. “These co-infections must be independently diagnosed and in some cases, treated with entirely different medications and protocols than the primary Lyme infection.”

Studies suggest that patients who have Lyme disease together with a co-infection may remain mysteriously ill and unresponsive to standard treatment. The three most common co-infections are: Babesiosis, a parasitic infection, Ehrlichiosis (HME or HGE) and based on some reports, Bartonellosis, both bacterial infections.

“Many Lyme patients have these co-infections,” says Dr. Kotsoris. “However, they are not routinely tested for them.” According to the Department of Health and Human Services, approximately 2/3 of patients with Lyme disease have at least one of these co-infections; however, many specialists believe the actual count is higher.

Misconceptions about co-infections abound because experts disagree on their diagnoses and treatment. Dr. Kotsoris offers counterpoints to these five common misunderstandings based on their findings.

**Ticks must be embedded for at least 48 hours to infect the person they bite.** Experts disagree; certain scientific evidence indicates that it could be 24-hours or less.

**Antibiotics to treat Lyme disease will also address co-infections.** A number of specialists recommend a mix of antibiotics to address co-infections.

**Diagnostics will identify co-infections.** A recent study of Connecticut ticks found that some were infected with up to six different microorganisms, but clinically available serologies and PCRs can only test for certain species of these pathogens. (And many tick-borne pathogens have yet to be identified.) Standard blood smears reportedly are reliable for only the first two weeks of infection, so they are not useful for diagnosing later infections and milder ones including carrier states where the germ load is too low to be detected.

**Multiple diagnostic methods are available; each has its own benefits and limitations.** Often a series of tests must be done over a period of time since the parasites and bacteria that cause the infections are only detectable in the bloodstream for a short time. For one patient, it took four months of testing before Bartonella appeared and eight months until Babesia appeared.

“A number of tick-borne disease specialists base their diagnoses on history and symptoms because the tests don’t always detect all of the strains.” explains Dr. Kotsoris.
Lyme disease and co-infections manifest different symptoms. As with Lyme disease, co-infection symptoms are non-specific, such as fever, chills, headache and malaise. “Many co-infections can easily be mistaken for those of other ailments such as chronic fatigue syndrome and fibromyalgia,” says Dr. Kotsoris. Lyme and co-infection tests should be done concurrently: Often the co-infections must be treated before or with the Lyme treatment.

According to Dr. Kotsoris, Co-infections are the rule rather than the exception. It is estimated that up to 1/3 of those with chronic Lyme are co-infected with babesiosis at the same time.

Time For Lyme is an organization dedicated to eliminating the devastating effects of Lyme disease and other tick-borne illness. Our mission is to prevent the spread of disease, develop definitive diagnostic tools and effective treatments, and to ultimately find a cure for tick-borne illness by supporting research, education, and the acquisition and dissemination of information. In addition, we will continue to act as advocates for Lyme disease sufferers and their families through support of legislative reform on the federal, state and local levels. For more information on our organization, please visit www.timeforlyme.org.