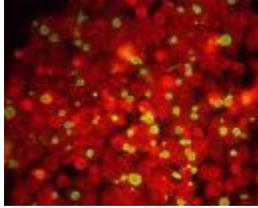


www.msrc.co.uk : Chlamydia Pneumonia

Chlamydia pneumoniae bacterium - one possible cause of Multiple Sclerosis?



Recently, the most convincing data ever presented relating infection with a specific organism to multiple sclerosis has been reported from the Department of Neurology and Pathology, Vanderbilt School of Medicine, Nashville, Tennessee. Dr. Subramaniam Sriram and coworkers, publishing their results in the *Annals of Neurology*, have demonstrated the presence of a specific type of bacteria in 100% of the 37 multiple sclerosis patients they studied.

As the authors reported, "The evidence of Chlamydia pneumonia in both progressive MS and relapsing-remitting patients suggests that the infection of the central nervous system with Chlamydia pneumoniae occurs early and persists perhaps throughout the course of the disease and does not differentiate between different clinical subtypes of the disease."

This purported relationship between risk for multiple sclerosis and infection with *Chlamydia pneumoniae* was recently substantiated in a study appearing in the March 2003 issue of *Epidemiology*. In this report, Harvard researcher Cassandra Munger found a 70% increased incidence of multiple sclerosis in women seropositive for the presence of *Chlamydia pneumoniae* antibodies.

This organism is a fairly recent addition to the list of bacteria known to affect humans. It is now recognized as a cause of pneumonia, pharyngitis, bronchitis, and several chronic diseases. More importantly, *Chlamydia pneumoniae* has now been recognized as playing at least some causative role in reactive arthritis and coronary artery disease – medical conditions which, like MS, are characterized by ongoing inflammation.

The idea that multiple sclerosis may be caused by some form of infectious agent is supported by several interesting observations. On the Faroe Islands prior to 1920, MS was essentially unknown. Subsequent to the invasion of British troops, the incidence of MS increased dramatically. This would support the contention that MS, at least on the Faroe Islands, was caused by some infectious agent to which the native population had not been previously exposed. In addition, the cerebrospinal fluid (CSF) in patients with documented multiple sclerosis, is typically found to contain high amounts of specific proteins known to be elevated in other nervous system disorders in which infectious causes have been clearly identified.

If there is such a strong relationship between the presence of *Chlamydia pneumoniae* and multiple sclerosis, how could its presence have been missed by researchers for so many years? The answer lies in the fact

that the discovery of Chlamydia in the spinal fluid of MS patients required the development of a very sophisticated test to detect a unique protein found on the cell wall of the Chlamydia pneumoniae organism itself. Indeed, this is not the first example of a profound delay in the identification of an elusive bacterium as the cause of a specific illness. It has been only in the past few years that the bacteria Helicobacter pylori has been demonstrated to be the causative agent in most cases of gastric ulcers. Incredibly, Helicobacter pylori has been identified in the stomachs of humans since the early 1900s, but medical researchers couldn't bring themselves to admit the possibility that a disease like gastric ulcers could be caused by a simple bacterium.

Another observation supporting the relationship between Chlamydia pneumoniae and multiple sclerosis is based on the discovery that two commonly used medications for multiple sclerosis, interferon-beta and methotrexate, profoundly inhibit the growth of the Chlamydia bacterium. This is interesting and provocative information as we don't yet fully understand why these drugs are sometimes effective in MS treatment.

Over the past several years, the medical literature has published various articles describing specific viruses thought to be the causative agent for multiple sclerosis, only to have these reports subsequently refuted. But this new research describing the possible relationship between Chlamydia pneumoniae and multiple sclerosis is most compelling. And the good news is that unlike viruses, specific antimicrobial medicines are available to treat Chlamydia pneumoniae.

Based upon this research, it is not unreasonable for patients with multiple sclerosis to consider an empiric treatment for Chlamydia pneumoniae. As this discovery is relatively new, no specific treatment protocols have as yet been created. And it will likely be several years until clinical trials have been designed, approved, funded, completed, and ultimately published, until we know for sure that MS patients should be treated. But in light of the present evidence, empirically treating MS patients for Chlamydia pneumoniae seems reasonable. Obviously this decision should be discussed with the treating physician. Antibiotics generally quite effective in treating Chlamydia pneumoniae infections include minocycline and tetracycline. Minocycline may be the more effective treatment since it is more able to penetrate the blood-brain barrier to enter the brain.

The Perlmutter Health Center protocol for the empiric treatment of Chlamydia pneumoniae in our MS patients is: Minocycline 100 mg twice a day for 21 days.

Again, the decision to engage in this empiric treatment should be made after patient and physician consider the literature linking Chlamydia pneumoniae to multiple sclerosis, as well as the potential risks of taking a course of minocycline or other antibiotic. It is always important when taking any antibiotic to also use a probiotic. These are nutritional supplements designed to reestablish appropriate levels of the "friendly bacteria" in the gut like Lactobacillus acidophilus and others which aid in the absorption of nutrients, help maintain the integrity of the gut lining, and assist in detoxification.

Source: Renegade Neurologist - A Blog by David Perlmutter, MD, FACN (20/11/08)

MS Link With Chlamydia

Research from America shows a link between the bacterial infection chlamydia pneumonia and **MS**.

US researchers have found chlamydia pneumonia in the spinal fluid of 8 out of 17 patients with recently diagnosed **MS**. The scientists found genetic evidence that the organism was once present in the spinal fluid all the patients. By contrast, no traces of chlamydia was found in the spinal fluid of people who did not have **MS**.

Ref: Medicine Today

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