



## LYME DISEASE LITERATURE

Chemotherapy. 2006;52(2):53-9. Epub 2006 Feb 22.

### **Lyme disease: the quest for magic bullets.**

**Stricker RB, Lautin A, Burrascano JJ.**

Lyme disease represents a growing public health threat. Recent molecular and genetic studies have confirmed that *Borrelia burgdorferi*, the spirochetal agent of Lyme disease, is one of the most complex bacteria known to man. Affinity for multiple cell types and the presence of non-replicating forms of *B. burgdorferi* have contributed to persistent infection and failure of simple antibiotic regimens. The controversial clinical science of Lyme disease has impeded reliable diagnosis and effective treatment of this protean illness. Two major clinical hurdles are the absence of a therapeutic endpoint in treating Lyme disease and the presence of tick-borne coinfections that may complicate the course of the illness. New strategies for the diagnosis, treatment and prevention of Lyme disease are urgently needed.

J Chemother. 2005 Sep;17 Suppl 2:3-16.

### **Review of treatment options for lyme borreliosis.**

**Taylor RS, Simpson IN.**

Lyme borreliosis (Lyme disease) is the most common tick-borne bacterial infection and the incidence is increasing in parts of Europe and the USA. Prompt antimicrobial therapy using oral agents such as doxycycline or amoxicillin is successful among more than 90% of patients. Inadequate penetration of oral agents into the CNS may result in the development of overt neuroborreliosis. The parenteral agent ceftriaxone is the drug of choice for severe acute and chronic infections, due to good penetration into CSF, convenient single daily dosage regimen and proven high efficacy in clinical trials involving a wide variety of disseminated infections. Regardless of therapeutic agent, there appears to a small minority of patients (<10%) who do not respond; such cases may be due to long-term persistence of borrelial cysts and to misdiagnoses based solely on seropositivity. Several adjunct therapies are available, including hyperbaric oxygen therapy and immune system supplements, but clinical trials have yet to be conducted.