Case report

ERYTHEMA MIGRANS FOLLOWING ACRODERMATITIS CHRONICA ATROPHICANS - FURTHER EVIDENCE FOR POSSIBLE REINFECTION WITH BORRELIA BURGDORFERI

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ABSTRACT

A 57-year-old woman, living in an area endemic for Lyme borreliosis (LB), presented with erythema migrans (EM) that developed four weeks after a tick bite on the left thigh. The serum ELISA IgG antibody titre against Borrelia burgdorferi (Bb) was highly positive. The patient was treated with minocyclin (200 mg/day, 14 days). Upon completion of therapy, the EM had cleared completely. Two years earlier, however, a diagnosis of acrodermatitis chronica atrophicans (ACA) on the left forearm and hand had been made on clinical as well as histopathological grounds. The serum ELISA IgG antibody titre against Bb was highly positive at that time also. A course of treatment with peroral amoxicillin (500 mg) and clavulanic acid (125 mg) three times a day (three weeks) led to marked improvement of the ACA skin changes. No more signs of this inflammation were found when the patient presented with EM. Many questions concerning molecular and immunologic aspects of LB remain open, especially the extent to which Bb antibodies protect against reinfection. The occurrence of EM in a patient who has previously had ACA may be explained by reinfection with Bb. Thus, the presented case substantiates the hitherto held suspicion that infection with Bb does not necessarily lead to protective immunity.

KEY WORDS

Lyme borreliosis, acrodermatitis chronica atrophicans, erythema migrans, reinfection, immunity