

ERYTHEMA MIGRANS MULTILOCULARE IN STYRIA (AUSTRIA)

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ABSTRACT

To characterize clinical, serologic, and histopathologic features of patients with erythema migrans multiloculare from Styria (Austria), an European area well known to be endemic for Lyme Borreliosis, 270 consecutive patients (m:f = 128:142, mean age = 54 years) with erythema migrans were studied at the Department of Dermatology in Graz, Austria between March 1993 and October 1995. 17/270 patients (m:f = 9:8, mean age = 37 years) (6.3%) presented with a multifocal form of the disease. Several findings in these 17 patients were remarkable. Anamnestic data/clinical findings: History of tick or insect bite(s): 10/17 patients (4 singular, 6 multiple); mean total number of lesions/patient = 4 (ranging 2-18); latency of 1 - 14 days (mean 7 days) in 9/17 patients (53%) between primary erythema migrans and secondary lesions; in these 9 patients the secondary lesions showed a different morphologic aspect in comparison to the primary erythema migrans; extracutaneous signs and symptoms: 7/17 patients (41%). Serologic findings: *Borrelia burgdorferi* serum ELISA IgG-antibodies: 9/17 patients (53%), IgM: 9/17 patients (53%). Histopathologic findings: Complete lack of epidermal changes and milder inflammatory dermal infiltrate in all secondary lesions (4 biopsy specimens) in comparison to primary erythematosa migrantia (5 biopsy specimens).

Our clinical and serologic findings are largely in accordance with the scarce literature on this condition from Europe where erythema migrans multiloculare is much rarer than in the USA. The pathogenesis of erythema migrans multiloculare which is currently defined to be a disseminated form of Lyme Borreliosis due to haematogenous spread of *Borrelia burgdorferi* will be discussed in consideration of our observations.

KEY WORDS

Lyme borreliosis, Borrelia burgdorferi, erythema migrans multiloculare, early disseminated disease

INTRODUCTION

Erythema migrans (EM) usually occurs as a single lesion. However, multiple (secondary) erythemas in one patient (erythema migrans multiloculare (EMM)) are quite frequent in the USA (25 - 50% of all EM

patients) (1), whereas EMM is rarely seen in Europe (4 - 10% of all EM patients) (2). In the USA up to 100 erythematous lesions may appear in one patient with EMM (1). On the contrary, EMM patients in Europe normally present with only few

