DIFFERENTIAL DIAGNOSIS OF ERYTHEMA MIGRANS

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ABSTRACT

The diagnosis of erythema migrans (EM) has to be made clinically as immunological tests are usually negative. It is possible to cultivate *Borrelia burgdorferi* from EM lesions, however this test is being done only in certain laboratories, it is time-consuming and expensive. A certain number of skin conditions may mimic EM, therefore a sufficient experience in dermatology is necessary.

KEY WORDS

erythema migrans, differential diagnosis, clinical presentation

DEFINITION OF ERYTHEMA MIGRANS

Erythema migrans (EM) is usually an expanding, non-scaling, non-raised homogeneous (diffuse) or more often centrally clearing erythema; its mainly bright-red border mostly has a width of 1 - 2 cm and is outlined sharply and somewhat irregularly. A central efflorescence consisting of a small papule up to a rather large plaque can sometimes be observed. The size varies considerably between about 5 and more than 65 cm. The duration ranges from 0.5 to 104 weeks. Atypical forms such as an elongated, irregular, diffuse or even spotted form is not uncommon. The minimal EM has a size of less than 5 cm and is either a stationary EM („erythema non-migrans") or represents the very small initial typical expanding EM.

DIFFERENTIAL DIAGNOSIS

INSECT BITE REACTION

An early insect bite reaction (IBR) may resemble many characteristics of EM: it is an expanding, homogeneous, non-scaling, bright-red erythema. Both EM and IBR may occasionally be slightly raised. In other words, it is often virtually impossible to distinguish both conditions within the first days after their appearance. If the patient insists that he/she was stung by a flying insect in the middle of the expanding erythema, an IBR may be assumed rather than EM. However, also some patients with EM claim that they were stung by an insect although they did not notice it; it is important to clarify this point with the patient. The most important point concerning differential diagnosis of