ANSWER TO PHOTO QUIZ (PAGE 134)

A PATIENT WITH FEVER AND SKIN LESIONS AFTER VACATION IN SOUTH AFRICA

DIAGNOSIS

Eschar lesion due to African tick bite fever.

The diagnosis of African tick bite fever was made because of the specific skin lesion, also known as an eschar. We prescribed doxycycline 100 mg 2dd for 7 days and serological testing for Rickettsial infection was performed. The fever disappeared 48 hours after starting treatment with doxycycline and the skin lesions improved and eventually disappeared. The early phase indirect immunofluorescent assay was negative. Repeat serology after 10 days showed a clear serum conversion, confirming the diagnosis of a Rickettsial infection most probably due to African tick bite fever considering her travel history. A thick blood smear for malaria parasites was repeatedly negative. Rickettsiae are gram-negative bacteria divided into several bio-groups. African tick bite fever of the spotted fever group is caused by R. africae and generally transmitted by ticks. Serology typically shows an elevated IgG/IgM antibody titre. An elevated IgG ≥ 1:64 or IgM 1:32 suggests the presence of a Rickettsial infection. African tick bite fever is quite common and represents 87% of all Rickettsial infections. With an incubation period of 5-10 days African tick bite fever is often seen in travellers from South Africa with an estimated rate of infection of 4-5% in travellers to rural sub-equatorial

Africa. The symptoms are self-limiting within 10 days in most patients. Rash due to Rickettsial infections is quite common and may present as a macular or maculopapular rash and even with a single or multiple eschar(s). Lymphangitis, aphthous stomatitis and arthralgias are known complications of Rickettsial infection. So far no fatal cases have been described. Doxycycline is the treatment of choice for mild disease whereas azithromycin can be used as an alternative prescription.¹⁻⁵

Clinicians should be aware of Rickettsial infection when there are typical symptoms (fever, myalgia, headache, eschar) in combination with a history of travel. Start early antibiotic treatment to reduce the duration of symptoms.

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