Bacillary angiomatosis in a German patient with AIDS

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Summary. A 52-year old male homosexual patient with acquired immunodeficiency syndrome (AIDS) presented in our clinic with multiple nodular papules (more than 100) spread over the whole body which had developed within 3 months. Bacillary angiomatosis was suspected, which is a bacterial infectious disease recognized recently mainly in patients with AIDS. Histological and immunohistochemical examinations of extirpated skin lesions were in agreement with the diagnosis, and the detection of rod-shaped bacteria in the lesions by Warthin-Starry silver stain confirmed it. The patient was treated with 2 × 100 mg doxycycline per day. The fever disappeared, and the cutaneous lesions showed a slight tendency to improve. However, after 5 days of therapy the patient showed increasing weakness, with muscle and bone pain. The patient died 10 days after the doxycycline therapy had been started. The cutaneous lesions in bacillary angiomatosis may resemble Kaposi's sarcoma and may therefore be misdiagnosed. The disease may be fatal, but timely antibiotic treatment is usually effective; therefore the diagnosis of bacillary angiomatosis is important. Although many cases have been reported from the United States, only one case is known from Europe. Our finding of bacillary angiomatosis in a German AIDS patient supports the concept of a worldwide distribution of this bacterial agent.

Key words: Bacillary angiomatosis - Rochalimaea - Acquired immunodeficiency virus - Human immunodeficiency virus

Bacillary angiomatosis is a recently recognized bacterial infectious disease that is seen mainly in patients with acquired immunodeficiency syndrome (AIDS) [22] but also in immunocompetent individuals [3,11,27]. In 1983 atypical subcutaneous nodules resembling Kaposi's sarcoma were described in patients with ADIS [20,23], which seem to be the first case reports of this new disease. Four years later the skin lesions were termed epitheloid angiomatosis [2,4]. Two of the five patients reported died as a result of the disease [2]. In 1988 bacteria were detected in the cutaneous lesions by Warthin-Starry staining [6,7,10], and 2 years later Relman and coworkers [16] succeeded in amplifying a unique sequence within the 16S ribosomal RNA of the bacilli found in the lesions by polymerase chain reaction. Sequence homology studies revealed that the pathogen is most closely related if not identical to Rochalimaea quintana [16], the etiological agent of trench fever. After the establishment of in vitro culture conditions [17] it was shown that two closely related bacteria can be isolated from the cutaneous and osseous lesions of bacillary angiomatosis, R. quintana and R. henselae [8]. The genus Rochalimaea belongs to the Rickettsiae and was named after Rocha-Lima who first characterized the agent of trench fever, also known as Wolhynisches Fieber [13].

This louse-borne disease was common in both World Wars. Since that time only relapses of trench fever have been reported, some occurring even after more than 10 years [12]. At present it seems likely that this old agent is responsible for several other diseases such as bacillary angiomatosis [16], peliosis hepatitis [15], intracerebral mass lesions [18], endocarditis [19], osseous lesions [1,8], septicemia [27], and splenitis [21]. Meanwhile, dermatologists differentiate three types of skin lesions: pyogena granuloma-like lesions, subcutaneous nodular lesions, and hyperpigmented indurated plaques [25]. In contrast to trench fever, the vector responsible for disease transmission in the case of bacillary angiomatosis is unknown so far but in the United States two cases in immunocompetent patients occurred after tick bites [11]. Bacillary angiomatosis can be successfully treated by doxycycline or erythromycin [25]. Until now only one case of bacil-
lary angiomatosis has been reported in Europe [5]. Here we report first case of bacillary angiomatosis in Germany.

Case report

A 52-year-old male homosexual AIDS patient presented in our clinic with multiple nodular papules spread over the whole body, which had developed within 3 months. During the last 2 weeks he had fever between 38°C and 39°C. Human immunodeficiency virus (HIV) infection was detected in 1990. The patient had not traveled abroad since the diagnosis of AIDS had been established in 1992. He was a hairdresser and had no contact to cats but was the owner of a dog. In April 1992 he had cerebral toxoplasmosis, which resolved after adequate therapy. In November 1992 cytomegalovirus retinitis was diagnosed, but in spite of gancyclovir (Cymeven) treatment he became completely blind. At the time of presentation the patient had lost 21 kg body weight during the past 8 months and was severely immunodeficient, with only four CD4-positive lymphocytes per microliter in the peripher-

Fig. 1. Cutaneous lesions in the face of the patient (a) and on his arm (b,c). e Pyogena granuloma-like, dusky-red lesions, some covered with a fine scale can be recognized.