Leprosy Patient History

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Enrico Nunzi, Cesare Massone, and Salvatore Noto

7.1 Patient History

Mycobacterium leprae (*M. leprae*) is the conditio sine qua non to develop leprosy infection and then the disease.

Anamnesis regarding the source of *M. leprae* is less important in countries where leprosy is considered to have been recently "eliminated" or where there is an important presence of new autochthonous cases [1].

On the contrary, in those countries where leprosy is an "imported" disease, searching for the source of the infection is very important. It is necessary to investigate if the patient has lived in countries in tropical or subtropical areas in the last 10–15 years, or if the patient comes from one of those countries. Short periods spent in these areas should also be considered, even if only on holiday [2]. Investigation must be carried out on cohabitants of the patient if they come from or have lived in these countries.

To identify countries in which it is possible to come into contact with *M. leprae*, it is important to critically consider official epidemiologic information. Several countries tend to underestimate or deny the presence of leprosy in their regions.

It is necessary to be very careful before diagnosing leprosy in those countries where the disease is rare and "imported." Histopathology is necessary to confirm the

E. Nunzi (✉)
Departamento de Dermatología, Universidad Técnica Particular de Loja, Loja, Ecuador
e-mail: enrico.nunzi.41@gmail.com

C. Massone
Dermatoloy Unit & Scientific Coordinator, Galliera Hospital, Genoa, Italy
e-mail: cesare.massone@galliera.it

S. Noto
Dermatologist, Private Practice, Bergamo, Italy
e-mail: salvatore.noto.genova@gmail.com

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diagnosis in those patients who show clinical and microbiologic parameters in favor of leprosy but in whom anamnesis is negative for possible contact with leprosy patients. If acid-fast bacilli (AFB) are present, they should be tested with polymerase chain reaction (PCR) to identify the bacteria.

Of 150 new cases observed in the referral center of Genoa (Italy), only one patient presented negative for contact with *M. leprae*. In the Netherlands, out of 1600 patients identified between 1945 and 1990, only a single case had never traveled outside the country [3].

7.2 Prodromal Symptoms

During anamnesis in patients suffering from the multibacillary form of leprosy, it is possible to discover the aspecific symptoms that characterize the prodromal stage. In the lepromatous form, the prodromal symptoms can persist over years with aspecific manifestations of the upper respiratory tract (numerous episodes of epistaxis, dryness of nostrils with formation of crusts) or bilateral edema of the malleolus and foot.

During anamnesis, symptoms such as localized paresthesia, plantar hyperalgesia, and neuralgia along peripheral nerves such as the ulnar nerve, trigeminal nerve, and sciatic nerve are referred by the patients.

7.3 First Symptoms

To understand the natural history of the disease in a patient, it is important to determine when and how the first lesion appeared, i.e., whether the lesions appeared abruptly at onset or slowly.

In anamnesis, to understand the first leprosy symptoms, it is important to search for the initial arrangement of the lesions on the body, the number of lesions, and if there is presence or absence of anesthesia.

These anamnestic data give important information on the "stability" of the disease, and it must be used in association with the clinical features to formulate therapeutic strategies.

Leprosy, a disease with chronic course, may begin with an "overture" with cutaneous and systemic symptoms (fever, neuralgia, arthralgia) of leprosy type 2 reaction. It is also possible to find an acute onset with cutaneous and/or nervous symptoms of leprosy type 1 reactions during pregnancy, after delivery, or in patients suffering from acquired immune deficiency syndrome (AIDS) under treatment such as the immune reconstitution inflammatory syndrome (IRIS) phenomenon.

Fever with cutaneous eruptive lesions and "red eye" (which appears between the first lesions and the diagnosis) are compatible with leprosy reactions.

7.4 Subjective Symptoms

An important subjective symptom in dermatology is itching.

A common opinion underlines the lack of itching in leprosy, but this is not always true. In fact, in this disease, there can be the presence of localized itching in the skin before the appearance of leprosy type 1 reaction lesions. Treatment regimen with clofazimine leads to cutaneous xerosis with widespread itching in connection with changes of environmental hygrometry, which happens in multibacillary patients under MDT treatment.

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