

CORRESPONDENCE

MITSUDA REACTION IN HIV-INFECTED PATIENTS. PRELIMINARY REPORT.

Sir,

Twenty two adult male HIV-infected patients, with ages varying from 24 to 46 years, were inoculated intradermally with 0.1ml of lepromin prepared according to WHO standards¹. In all cases the lepromin injections were made on the volar surface of the left arms, after informed consent. According to the classification system of the clinical manifestations of HIV infection (CDC, 1986)^{2,3}, most of these patients (17 or 77.3%) belonged to group IV, the remainder being classified on group II (3 or 13.6%), group III (one patient or 4.5%) and in an intermediary group II/III (one patient or 4.5%).

When the late reactions to the lepromin injections (Mitsuda reaction) were evaluated as recommended by the IV INTERNATIONAL LEPROSY CONGRESS (1953)⁴ there was observed a very high proportion of negative responders (13 or 59.1%), represented by 11 patients of group IV, one of group II and one of group III. A doubtful (+/-) Mitsuda reaction was exhibited by 2 patients of group IV, while 6 patients (4 of group IV, one of group II and that of group II/III) disclosed a weakly positive response (+). Only one patient, who belonged to group II, exhibited a strong Mitsuda reaction (++) . As a consequence of the very high frequency of Mitsuda negative reactors among the HIV-infected patients, the distribution of the several classes of the lepromin reaction among them differs significantly from that observed among 100 healthy adults with no known contact with leprosy individuals (4-, 19+/-, 39+, and 38 strong reactors, i.e. 29++ and 9+++)⁵. A comparison of these proportions yielded an extremely high chi-square ($X = 46.640$; $p < 0.001$).

An even more interesting result was provided by the histological analyses of the biopsies taken on the site of Mitsuda test disclosed by 17 of these patients. In fact, 7 (41.2%) of them revealed an unusual microscopical picture, similar to those seen in borderline lesions: inflammatory infiltrate, epithelioid cells, macrophages containing acid-fast bacilli, and sometimes a tuberculoid granuloma but full of that bacilli. This unusual reaction was observed in 5 Mitsuda-negative HIV-patients (4 of group IV and one of group III) as well as in 2 Mitsuda positive + responders (one of group IV and that who was classified as II/III). The histological

reactions seen in the other 10 biopsies did not differ from microscopical findings usually observed in Mitsuda responses of healthy individuals. Thus, 3 biopsies exhibited an infiltrate with a small or moderate amount of epithelioid cells without acid-fast bacilli or giant multinucleated giant cells; 3 biopsies showed epithelioid cells highly concentrated, with no acid-fast bacilli, but with multinucleated giant cells, as well as lymphocytes; one biopsy exhibited a nonspecific inflammatory reaction with lymphocytes, but without macrophages or acid-fast bacilli, and 3 biopsies showed no histopathological signs at all.

These intriguing results prompt further research on the Mitsuda reaction macroscopically and histologically analysed in a larger number of HIV-infected patients, in order to investigate at least the possible importance and interpretation of this spectral reaction for prognosis of clinical evolution of AIDS and other forms of presentation of HIV infection.

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