

## CORRESPONDENCE

*This department is provided for the publication of informal communications which are of interest because they are informative or stimulating, and for the discussion of controversial matters.*

### REACTIONS IN ARRESTED CASES AFTER BCG VACCINATION

TO THE EDITOR:

Dr. E. D. L. Jonquieres, of Buenos Aires, in the third issue of THE JOURNAL last year [27 (1959) 268], told of certain kinds of reactions he had observed in arrested lepromatous cases after BCG vaccination given in an attempt to establish lepromin positivity—and thus, obviously, to establish resistance to relapse. He then posed the following questions:

(1) Have other investigators observed reactions of the type described, after BCG vaccination of negative lepromatous patients?

(2) Is the attempt to convert by BCG vaccination the lepromin reactivity, in apparently residual lepromatous cases, justified in view of the risk of reactivating the disease?

(3) Is it advisable (a) to leave a negative lepromatous case in "status quo" of apparent cure, continuing the sulfone treatment indefinitely or until there is a definite spontaneous change of the Mitsuda reactivity, or (b) on the other hand should an attempt be made, at some time, to certify its cure by some means of reactivation?

I have personally had the opportunity, on several occasions, of studying the behavior of apparently cured lepromatous patients with respect to the lepromin test, and of attempting—as Jonquieres did—to induce positivity of that reaction by means of BCG, and have observed the same reactions he describes.

In one of my patients the evolution of the disease after BCG vaccination was extremely severe as regards the neuritic involvement. Consequently, I believe that the attempt to modify the lepromin reactivity by means of BCG vaccination in residual cases is not justified. We are not masters of reactions which may be precipitated, and sometimes they may be extremely severe.

I have also observed reactivation in tuberculoid leprosy after BCG vaccination [*Arch. Inst. Pasteur Martinique* 11 (1958) 108-110]. Floch, in French Guiana, has observed tuberculoid lesions appear in children recently vaccinated with BCG [*Bull. Soc. Path. exot.* 51 (1958) 353-359]. Floch and I both believe that our observations are unquestionably similar to those of Bechelli and Quagliato [*Rev. brasileira Leprol.* 24 (1956) 23-26]. They thought that the BCG vaccination had not prevented the occurrence of leprosy infection, while we believe—in view of

the very short period of time (a few weeks) between the vaccination and the appearance of leprosy manifestations—that those children had already been infected with leprosy before the vaccination. Therefore, we believe that BCG vaccination in leprosy endemic countries should be done as soon as possible, before any contact of the subject with *M. leprae*.

A very recent study, based on 295 apparently cured lepromatous cases, showed that the late lepromin reaction was positive in 2 per cent of the cases after 3 years of treatment, in 9.4 per cent after 3 to 5 years, and in 13.6 per cent after 5 years. In the lepromin-positive lepromatous patients the BCG vaccination (100 mgm. by mouth) produced no reactivation; but the small number of observations requires confirmation on a bigger scale. If it is confirmed that the BCG testing of Mitsuda-positive residual lepromatous cases produces no reactivation, I think that the sulfone treatment should be continued in all residual lepromatous subjects until they become Mitsuda positive. Even when the change of lepromin reactivity from negative to positive occurs, treatment should be continued for a fairly long time (from one to two years), and that the patient should always remain under clinical and immunologic surveillance.

*Institut Pasteur de la Martinique*  
*Fort-de-France, Martinique*

E. MONTESTRUC  
*Director*