

## THE EFFECT OF CORTISONE ON *MYCOBACTERIUM LEPRAE*-INFECTED MICE

Sir,

In my article titled 'Jacinto Convit and the Leprosy Vaccine', which appeared in *Interciencia*, Vol. 7, September–October 1982, I wrote: 'I later worked with Martin Vegas, in a laboratory set up in his house's garage, at a time when the University laboratories had been closed down by Pérez Jiménez' dictatorship, unsuccessfully trying to infect with *M. leprae* mice treated with huge doses of cortisone, with a view to enhance (infectivity), in analogy with what happens with tuberculosis infectivity . . . (these negative results were never published).'

You now kindly ask me to record some of our experiences, and I gladly do so, in the briefest possible manner. I cull the following from the now yellowed protocol pages, which we have kept.

Vegas and I began our experiments on 15 December 1951. We studied six groups of 20 white mice each. Injections of cortisone and solvent were started 6 days before inoculation. Experimental groups were as follows: 1) Intraperitoneal inoculation with macerated *Mycobacteria*-rich material obtained from lepromatous leprosy cases; cortisone 0.1 mg daily subcutaneously, 2) subcutaneous inoculation plus 0.5 mg cortisone daily, 3) intraperitoneal inoculation plus daily injection of cortisone solvent, 4) subcutaneous inoculation plus daily injection of cortisone solvent, 5) intraperitoneal inoculation without any treatment 6) subcutaneous inoculation without any treatment.

Mice were observed daily. Those that died were immediately autopsied and examined. Smears and histological sections were made from testicles, liver and spleen. Experiments were terminated in June 1952, when all surviving mice were sacrificed and their organs examined.

The results were briefly as follows: there was no difference in mortality between the cortisone-treated and the untreated mice. Nor was there any difference in the lesions observed. Both in cortisone-treated and untreated mice, occasional *Mycobacterium globi* and isolated bacteria were observed in the skin, liver and spleen, with no apparent increase in the cortisone-treated animals. The feeling was that *Mycobacteria* in these animals acted as a foreign body rather than as truly infective material. It was concluded that cortisone did not lead to infectivity by *Mycobacteria* in mice, under the conditions of the experiment.

Had we been able to demonstrate infectivity by *M. leprae* under the effect of cortisone, this would have been a breakthrough in the pre-armadillo days. As it is, the findings are only of historical interest, and I am presenting them as such.

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