

CAROTENE TREATMENT IN BRAZIL

In a recent issue of THE JOURNAL [8 (1940) 179] there was published an article by Dr. Fonseca Ribeiro, director of the Department of Organic and Biological Chemistry of the Veterinary Medical Faculty of the University of São Paulo, Brazil, reporting a study of the spread of rat leprosy bacilli in laboratory mice. The distribution in the organs after inoculation with living bacilli was compared with that when dead bacilli were used. Against these findings, comparison was then made of the distribution of bacilli in animals that had been injected with living ones and treated with fractions of a certain vegetable carotenoid substance made by the author, the preparation of which was not described. The findings were highly conservative, the data being treated statistically in a way that, so far as we are aware, is quite unique in studies connected with leprosy.

In the current literature section of the present issue of THE JOURNAL are abstracts of five reports of the therapeutic application of Fonseca Ribeiro's product. Three of them are by Dr. J. M. Gomes, of the Institute of Hygiene of the University of São Paulo, on work done at the Santo Angelo leprosarium, and one by Dr. A. M. de Moura of Paraná, on cases treated at the São Roque leprosarium in that state. All of these, published in 1939, indicate high favor for the drug. The fifth is a more recent report, of very different tenor, by two physicians at the Sanatorio Padre Bento. Regarding the first four, quite aside from the observations set forth and conclusions indicated, they present two rather striking features. First, two of them (the

first one by Gomes and that by de Moura) were written after surprisingly short experiences with the treatment, though the last one by Gomes is of the period of one year. Second, they were distributed in reprinted form in English translation, revealing an extraordinary degree of energy in disseminating abroad the information which they contain.

In the fourth issue for 1939 of the *Revista Brasileira de Leprologia* [7 (1939) 456-466] there appeared a representation addressed to the Secretary of Education and Health of the state and to the members of the Sociedade Paulista de Leprologia, before which it was read on November 27, 1939, protesting against and denouncing a campaign recently carried on against the leprosy service of the state, stated to be directed by a laboratory which manufactures a supposed specific for leprosy. This report, unanimously approved by the meeting, has been abstracted by J. W. Lindsay, in *Leprosy Review* [11 (1940) 114-115] as follows:

"Alfon" is the trade name of a "carotene" product prepared in the pharmaceutical laboratory of Mr. Renato Fonseca Ribeiro, a state official of the Public Health and Food Control Department. In August, 1938, the São Paulo leprosy prophylaxis service received a request that a certain number of leper patients be placed at the disposition of Dr. José Maria Gomes, of the Institute of Hygiene, for the application of his new treatment by "Alfon." The director of the leper colony of Santo Angelo (São Paulo) complied with this request and a total of 640 cases were submitted to the treatment. The experiments were begun the following month, September, 1938.

It was noticed that from the very beginning the experimenter was always accompanied on his visits to the leper hospital by the laboratory proprietor, Sr. Fonseca Ribeiro. Within twelve days of the beginning of the experiments, "Alfon" began to be advertised in the public press and broadcast on the wireless as a most marvellous specific for the cure of leprosy. Public lectures on the subject were also given in different parts of the country. So intense was this propaganda that the medical authorities began to wonder what it meant, and the director of the leprosy prophylaxis service published a protest against a "scientific experiment" being converted into a "commercial enterprise." Extraordinary and sensational claims were being made for the efficacy of "Alfon," "a remedy," it was said, "that could raise up in twelve days lepers who had been bed-ridden for months." This article does not reproduce the favourable reports that must have been given of the many cases that had been quoted to support the claims of the efficacy of "Alfon." After a year's trial (August, 1939) the director of the leprosy prophylaxis service ordered the suspension of the experiments because of the many disastrous results of the treatment that were stated to have been observed.

In reprisal the promoters of the "Alfon" treatment threatened legal proceedings against the director of the leprosy prophylaxis service and began a campaign against the methods of the recognized leprosy institutions.

In this article are given the names of over fifty Brazilian leprosy specialists subscribing to the conclusions arrived at as the result of the observations made by them during the year of experimentation with "Alfon" in the Santo Angelo leper colony. They found that the experimenter had not exercised due care in the initial examination of the patients and no proper records were kept. No routine examination had been made or recorded during the course of the treatment; only subjective symptoms were recorded. Their findings were as follows:

(1) That the "Alfon" treatment is distinctly "reactivant" of the disease, especially in its cutaneous form.

(2) Contrary to what the experimenter himself published, "Alfon" was found to have no effect upon leprosy reaction or the neuritis—rather did it promote these complications with more frequency, and sometimes with unusual virulence.

(3) Violent reactions were produced in the eye affections, very grave cases of ocular lesions occurring, and a percentage of 2.93 cases of blindness.

(4) In nasal cases "Alfon" produced considerable increase in ulcerations and nodules, a result which explains the intense positivity of the nasal mucosa immediately after the employment of the drug.

A detailed analysis is given of the clinical and bacteriological observations made during the period of observation of the 640 cases experimented upon.

With no specific reference, but with obvious intent, is the following editorial note which appeared in the same issue of *Leprosy Review*:

The life of the leper is one that is full of discouragements. It is therefore incumbent on those who are in any way connected with his treatment or hopes of recovery that they should be particularly careful not to raise false hopes in his mind, which may later lead to cruel disappointment. Many errors have been made in claiming the efficacy of anti-leprosy drugs, either as the result of the sanguine temperament of the doctor, or on account of his lack of familiarity with the course of leprosy, which has led him to mistake anergic suppression of lesions for real and permanent improvement. Much more culpable is the conduct of those who, for commercial reasons, make big claims which have not been fully established by carefully planned and controlled experiments.

With the sentiment thus expressed no honest person can possibly disagree. It is altogether unfortunate, if there is any virtue in substances of the class involved in this affair (vitamin A), that the experiments should have been conducted and exploited in the manner indicated. That fact, however, may be expected not to interfere with proper investigation of possible benefits to be derived from the use of vitamins in the treatment of leprosy.