

## EFFECT OF REACTIONS IN LEPROMATOUS LEPROSY

Back in the 1920's, especially, the idea was widely held that to get the most effect from leprosy treatment it was necessary to induce some sort of reaction in the patient. Those were the days when the derivatives of chaulmoogra (or hydnocarpus) oil constituted the then "new" treatment of the disease, and before the tuberculoid form was recognized and distinguished. Potassium iodide came to have a place in the medicamentation recommended by some authorities.

Now in the sulfone era, as a voice from the past, comes Schujman holding that lepromatous cases which have the "frequent, severe and prolonged lepra reactions" present less severe late effects than do those who have not had such reactions, and advocating the deliberate artificial induction of reactions for therapeutic purposes. He has asked for other opinions on the matter, and the result of an inquiry appears in the correspondence section of this issue.

The ten answers comprised in the symposium are hardly susceptible of reduction to a tabulation, even of the Gallup poll type. However, nobody gives an unconditional, outright approval of Schujman's thesis, and those who put in a good word for reactions specify either the degree or the variety that may be beneficial. Incidentally, not the least interesting feature of the symposium lies in the matter of the forms of reaction in lepromatous leprosy that are recognized.

Four contributors (Chaussinand, Brown, Hayashi and Lara) believe that lepra reaction, of whatever kind, in lepromatous leprosy is in the final accounting not beneficial. Of the two who—like Schujman himself—write of "lepra reaction" without qualification, Muir regards the lesser degrees of reactions as helpful, but not the more severe ones. Brown harks back to the hydnocarpus days when he tried to adjust the dosage so as to cause a very slight rise of temperature after each dose, but nothing like that is needed nowadays. Lauro de Souza Lima would have voted with Schujman twenty years ago—as in fact he did—but he now regards the problem posed by Schujman as no longer existent; and apparently Eduardo Rodriguez is of like mind.

Of the several contributors who specifically mentioned different kinds of reactions, only Floch listed all three of them: (1) the reactivation of existing disease (to which he applies the term "acute lepromatization"), (2) the erythema nodosum leprosum type, and (3) the "reversal" or conversion phenomenon.

1. "Acute lepromatous activation," the classical lepra reaction: Called the "true" lepra reaction by Chaussinand, the "genuine" one by Contreras, and "acute lepromatization" by Floch, all of whom regard it as harmful, aggravating the existing condition. But Davison and Kooij, who call it "acute lepromatous infiltration" and speak of it as a condition which occurs early in the disease, regard it as beneficial.<sup>2</sup>

<sup>1</sup> DE SOUZA LIMA, L., DEBARROS, M. and SCHUJMAN, S. Influencia de reacção leprotica na evolução da lepra cutanea. Rev. brasileira Leprol. 4 (1936) 129-131.

<sup>2</sup> As stated in an article by Tajiri in THE JOURNAL [23 (1955) 370-384; footnote, p. 370], "acute lepromatous infiltration" is the term usually used by Japanese writers, but he had agreed to "acute lepromatous activation" to help distinguish this condition from the reversal phenomenon, about which he was writing under the name "acute infiltration in lepromatous leprosy."

2. Erythema nodosum leprosum (including the erythema multiforme variety): This is the only kind of reaction discussed by Hayashi or mentioned specifically by Lara, both of whom find the balance unfavorable. Chaussinand, too, regards it as something to be avoided. Davison and Kooij, commenting that it occurs late in the disease, hold it to be harmful. <sup>3, 4</sup> Floch regards it as variable in its effects; and Contreras, speaking generally, says that the erythema nodosum type of reaction, in whatever disease it occurs, more often enhances the resistance than causes harm. It does not appear that either of these authorities would deliberately induce the condition as a therapeutic measure.

3. The "reversal reaction":<sup>5</sup> Mentioned only by two contributors. Hayashi mentioned it as one of two forms of reaction which occur in lepromatous leprosy but did not discuss it. Floch regards it as beneficial. (It must be noted, however, that the favorable basic change which is represented outwardly by the appearance of this more-or-less tuberculoid reaction must have occurred in the patient beforehand, to cause the peculiar reaction, rather than afterward as a result of it.) Of what consists the "involution" condition, the "conversion of clinical form," of which Eduardo Rodriguez speaks is uncertain—at least to this reviewer, unless it is this reversal reaction.

It is to be seen from this sampling, therefore, that whereas no contributor believes that "frequent, severe and prolonged" reactions in lepromatous leprosy are beneficial, there are considerable variations of opinion as regards the effects of certain forms or degrees of reactions. There is a division as regards erythema nodosum leprosum, with Contreras regarding it as beneficial more often than not, and Floch finding it sometimes so, but with Lara, Hayashi, Chaussinand, and Davison and Kooij of contrary opinion—the last-named having recently published on the subject. Conspicuous is the lone stand of Davison and Kooij in favor of "acute lepromatous infiltration," which others believe aggravates the patient's condition.

One last comment is ventured. It would seem that by this time, the middle of the twentieth century, leprologists should have been able to come to a general agreement regarding the forms of reactions that occur in lepromatous leprosy, if not about the names to apply to them. One may wonder if this matter of reactions in leprosy as a whole may not perhaps be worthy of the attention of the next international congress.

—H. W. W.