CORRESPONDENCE

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

The Classification of Leprosy

To the Editor:

It seems unfortunate that there has arisen so much confusion, and that not a little heat has been expended in regard to this subject. Classification in other diseases, e.g., tuberculosis, kidney disease, cancer, etc., is taken as essential to the understanding of these conditions, but when a classification of leprosy is suggested it seems to trigger off a dispute among clinicians and research workers out of all proportion to its worth.

I am of opinion that this confusion arises for two reasons, (1) because the clinical signs of the disease are not correlated with the histopathologic picture, and (2) because the pattern of leprosy, while basically the same all over the world, nevertheless shows some variations. Leprosy, in its total presentation in regard to clinical signs and symptoms, is like a mosaic; if one is able to see the complete pattern the various shades and differences fall into their proper place, but if one is concentrating on a particular pattern in the mosaic, one sees nothing else but that pattern and cannot understand why others, who may be looking at a different section of the total picture of leprosy, cannot see the same pattern.

A recent contribution by Dr. R. D. Azulay[1] is written almost entirely from the Latin-American point of view, and as far as Dr. Azulay is concerned, his presentation of the subject is correct, so long as one is looking at Latin-American leprosy, but when one considers the broad spectrum of leprosy as a world-wide disease, then there are certain aspects of this presentation which are confusing to those who see only the Afro-Asian aspects of the disease. Dr. Azulay is perfectly correct when he relates the problem of classification to the state of resistance of the individual, and I could not agree with him more when he says that when approaching this very important subject in connection with the assessment of the clinical condition of the individual, the following must always be taken into account: clinical observation, bacterioscopy, the lepromin reaction and histopathology. These data, as he notes, are interdependent for, when properly assessed, they give an adequate indication of the tissue response of the individual to the challenge of *M. leprae*. But when Dr. Azulay begins to describe the various clinical manifestations of leprosy, and particularly when he discusses such terms as reactional tuberculoid, borderline and uncharacteristic lesions, he certainly begins to confuse the picture.

Dr. Azulay talks about the spectrum of leprosy, and I repeat the question which I asked in my letter to The Journal concerning Dr. Leiker's contribution: How can one have a borderline in a spectrum? It would appear to me that Dr. Azulay's conception of the borderline group is similar, if I have understood correctly, to that which Dr. Wade originally described as borderline. I had the privilege of hearing Dr. Wade's masterly exposition of borderline leprosy at the Conference of the Indian Association of Leprologists earlier this year (1965). One could not but admire the clarity and determination which Dr. Wade demonstrated and his explanation of what he meant by borderline, for, after all Dr. Wade was the first leprologist to use this term, I believe, and he certainly put forward his argument in a masterly fashion. Nevertheless it seemed quite obvious to me that it was the predominant racial varia-

[1] Azulay, R. D. Contribution to the study of borderline and indeterminate leprosy. Internat. J. Leprosy **33** (1965) 813-828.

tion of leprosy as seen in the Philippine Islands that caused him to reduce his borderline group to a very narrow band in the total spectrum of leprosy. The reason for this, it would appear to me, is that the Filipino, being more akin to the Mongolian group of races than to the Indo-African, is unable to develop, in the majority of instances, that exquisite tissue response seen in the more darkly pigmented people of India and Africa. If, therefore, we assume that Dr. Wade's borderline is equivalent to that which Dr. Khanolkar and I, and subsequently Drs. Jopling and Ridley, have described as dimorphous lepromatous or borderline lepromatous, the misunderstanding which has arisen would be resolved. In this connection it is significant to note that Dr. Azulay considers that a case is lepromatous if lipoids can be demonstrated in frozen sections stained with Sudan III and Scharlach R. If this, then, is his criterion for a diagnosis of lepromatous leprosy, or if he considers that if lipoids are demonstrable in a section the transformation to lepromatous leprosy is complete, this further clarifies his approach to the classification of leprosy, and, therefore, if we bear these points in mind there should be no confusion in our thinking.

When Dr. Azulay talks about the mutation of T to L, he is also referring to that large intermediate zone which I have, along with Dr. Khanolkar, called dimorphous. Dr. Azulay presents the Latin-American point of view in regard to the evolution of leprosy, and the Latin-American point of view, of course, applies to Latin-American leprosy, but it certainly does not apply to the lesions which are seen in Africa and in India and in many other areas of the world. But in doing so Dr. Azulay presents the Latin-American point of view, which is naturally based on the clinical manifestations of leprosy as seen in that continent. So long as workers fail to take particular note of the finer details which leprosy presents clinically, and disregard certain histopathologic features as unimportant, just so long will there be difficulty in reconciling various viewpoints of leprosy as represented by the clinical appearance and histopathologic picture of leprosy in different countries. If one is not careful to define the exact edge of a lesion, then the difference between what has been called established tuberculoid leprosy and the dimorphous tuberculoid lesion will not be appreciated. In the same way, if one does not take note of the zone immediately underneath the epidermis in a histopathologic section, then, again, the difference between true tuberculoid leprosy and the tuberculoid dimorphous picture will not be understood. I should like to repeat what I have frequently said, viz., that, no matter how tuberculoid the histopathologic section appears, if there is a free subepidermal zone, then it *cannot* be a classical tuberculoid lesion and should be placed in the dimorphous zone. If the histopathologic picture of tuberculoid leprosy is seldom seen, it is not surprising that it carries no weight in the thinking of our Latin-American colleagues.

In conclusion, therefore, unless one sees the whole pattern of leprosy as it is, not in one country but in *all* countries, there is bound to be confusion of thought, for one can only describe that which one sees or with which one is familiar. If the experience of the leprologist does not extend to Africa, to India and elsewhere in the world, and is confined to Latin-America, then the point of view which Dr. Azulay sets forth in his article is correct. But, if the leprologist has had the privilege of seeing leprosy in many countries and in races of all degrees of skin pigmentation, then this contribution of Dr. Azulay's, while sound enough in regard to Latin-America, will tend to be misunderstood.

The only way to resolve our differences is for the few top-ranking leprologists to meet together with clinical photographs, histopathologic sections, case histories, etc., of those of their patients who are in what I might call the broad bracket of tuberculoid leprosy, and see whether their approach to the classification of the disease is at variance. Until this is done, and so long as workers cannot visualize the clinical and histopathologic picture of leprosy which is presented to specialists in other countries, this argument with regard to the classification of the disease will continue.

I trust that this attempt to explain why our Spanish and Portuguese friends, as well as those working in the Philippine Islands, and elsewhere where the racial groups are predominantly Caucasian or Mongolian, are unwilling to accept the presentation of the clinical and histopathologic picture of leprosy seen in other countries than their own, will find acceptance. I do not think we should discuss classification any further, but accept the fact that the competent clinician describes what he sees, and that it is difficult to modify his opinion to include what he does not see.

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