TO THE EDITOR:

There remain problems of classification which will have to be considered at the next leprosy congress, and for that reason—however belated it may seem—I would like to refer to the two letters on the subject, by Dr. Dharmendra and Dr. H. H. Gass, which appeared in THE JOURNAL last year [22 (1954) 224-227]. In the opinion of representative Indian workers they were quite justified in certain of the criticisms of the Madrid classification which they offered.

In the first place, the "simple" flat macules which at Madrid were put into the same class with the elevated tuberculoid lesions should not be there. That kind of simple macules should be grouped separately, and the most suitable designation for them is "maculoanesthetic."

In the second place, the splitting up of cases with common clinical manifestations due to nerve trunk involvement, and their distribution to several classes, is equally objectionable. That can be done purely on surmise, and therefore a given case would very likely be classified differently by different workers.

There is no indication of how a "pure neuritic lepromatous" case could be differentiated clinically from a "pure neuritic indeterminate" case. In both cases the lepromin reaction might be negative. Dr. Gass believes

that the differentiation of a pure neuritic form of the lepromatous variety from a pure neuritic of the tuberculoid variety can be made definitely only from the result of the lepromin test and biopsy. Nerve biopsy is inadvisable, and often not practicable. Furthermore, for a large number of leprosy workers the lepromin test may not be always possible. Even if it be possible, it may be helpful only in typical lepromatous and typical tuberculoid cases, whereas in atypical lepromatous and tuberculoid cases, and in borderline and indeterminate cases, it may not be helpful if the reaction is "doubtful." Therefore, it would be much simpler if cases presenting signs of nerve trunk involvement were to be grouped separately, as "polyneuritic."

Another objection raised by Dr. Gass is of a different category. This was in reference to the statement made in connection with the "borderline" case that, "this group may arise from the tuberculoid type as a result of repeated reactions and sometimes evolves to the lepromatous type." He is quite right in pointing out that this statement is inconsistent with the basic idea of the polar types, namely, "Type connotes clinically and biologically stereotyped features, characterised by marked stability and mutual incompatibility." Dr. Wade is of the opinion that the stability is not absolute, and reiterates the possibility of change of the tuberculoid type to the borderline condition as a result of repeated reaction, while Dr. Gass holds that if it is accepted that the tuberculoid type is evidence of tissue immunity, then it cannot follow that reactions of tuberculoid lesions lead to either borderline or lepromatous change.

This difficulty has been created by too much stress being laid upon to the polarity of the lepromatous and tuberculoid types, leading to the belief, or assumption, that one cannot change into the other. I do not question the concept of the polar types, or the belief in their *marked* stability, but refute the idea that the stability is *absolute*. The truth is that a tuberculoid case may transform to the lepromatous type, although it is a rare occurrence. The fact that this may happen should be made clear, and more widely known. To that end I give the following example.

Case No. 7368. Multiple patches, thick, well-defined and erythematous (Fig. 1). History of reactions every winter for the past three years; slight signs of reaction present. Extensive anesthesia on the left foot, leg, thigh and buttock. Smears: Left forearm, one bacillus in 50 fields; right arm, negative. Lepromin: Erythema 14, induration 4; positive. Classified as tuberculoid.

After one year's treatment, the skin lesions had subsided considerably. Smears: Slightly positive. Lepromin: Erythema 20, induration 4; positive. The patient stopped treatment.

Returning seven years later, the patient presented nodules and infiltrations all over the face, ears, body and extremities (Fig. 2). Nerves thicker than before, and more anesthesia. Smears: Right ear, 3+; nose, 2+. Lepromin: Slight erythema and induration; negative. Histopathology: Leproma.

In this case, therefore, the initial positive lepromin reaction subsequently became negative, indicating decrease in tissue immunity, with the result that the case changed to the lepromatous type.

The idea that a strongly positive lepromin reaction indicates immunity and that the positivity persists is correct in the majority of cases. There are exceptions, however, as will be evident from the following case:

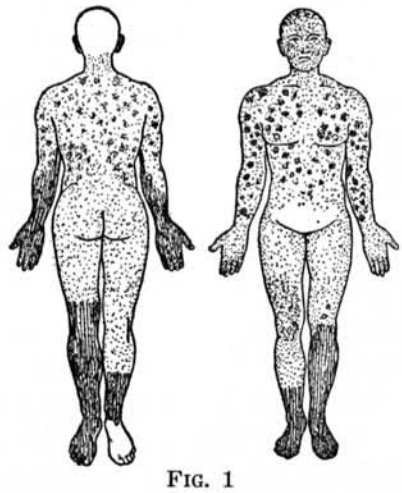

FIG. 1

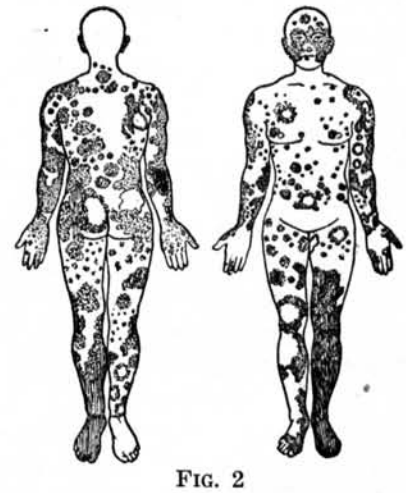

FIG. 2

Case No. 7625. Patient presented raised, red, anesthetic patches (Fig. 3). Nerves thick. Examinations March 3, 1944: Smears: positive, 2+. Lepromin: Erythema 19, induration 5; positive. Classified clinically as tuberculoid.

Under treatment the condition improved. On April 24, smears showed only 2 bacilli in 50 fields; lepromin reaction about as before. On July 30, a smear was negative; lepromin: measurements 26/6. On August 13, 1946, still negative bacteriologically, lepromin 30/3.5. Stopped treatment.

When the patient returned five years later there were extensive infiltrations and nodules (Fig. 4). Smears, right ear and nose, both 2+. Lepromin: Negative. Histopathology: Leproma.

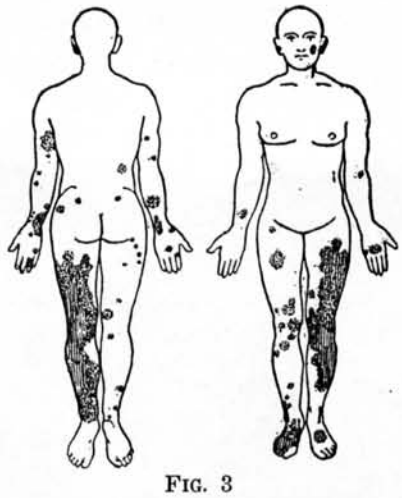

FIG. 3

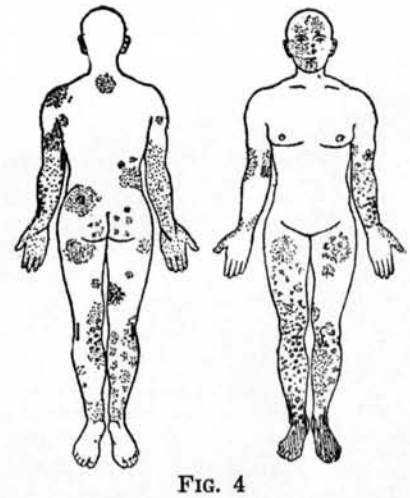

FIG. 4

In this case the smears became negative within 5 months and remained so for 2 years, and the lepromin reaction remained positive for about

2½ years. Later, however, the case became lepromatous, lepromin negative and bacteriologically positive.

Moreover, it is also a fact that in some cases lepromatous and borderline histological changes may be found in the same patient; notably, a section from the ear may be lepromatous and one from another area may be borderline. Or, lepromatous and tuberculoid changes (dimorphous) may be found in the same section. Therefore, it is not only true that a tuberculoid case can evolve to the lepromatous type, but also that the double histology may be found in the same patient or even in the same section.

Under the circumstances it would be better to drop the word "polar" in discussing classification, and to call all the different groups of cases either "types" or "forms."

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