

Should Indeterminate Leprosy Ever be Diagnosed?

TO THE EDITOR:

I have for some time been worried about indeterminate leprosy. Some people find this a very easy diagnosis to make. For example a recent paper (1) reports 1265 new cases of leprosy in which 953 had single lesions of the "indeterminate, tuberculoid or anaesthetic type." The authors granted that many such single lesions showed a tendency to regress spontaneously. Now maybe it is because I earn all my income in private practice, or perhaps there is another reason deep in my psyche, but I don't like to tell parents that their child has leprosy unless I am able to prove it. I try to reach a diagnosis in three ways (clinical, bacteriological, and histological) and prefer to be convinced on at least two counts before I make the diagnosis.

I have been looking to other authorities for help. Browne (2) reported a study of 2759 cases in whom lesions diagnosed as indeterminate or tuberculoid *all* regressed spontaneously. In an area near the Congo river, the trust in medical auxiliaries was so great that "all persons with some persisting non-irritating skin lesion presented themselves voluntarily to the leprosy dispensaries within a few weeks of its appearance." There is no mention as to whether any patient was seen in the 8 years of this study with pityriasis alba, idiopathic hypomelanosis, vitiligo, etc. Every patient was considered to have a history of constant nearness to contagious index cases, and all that could be said about nerve involvement was that "slight tactile impairment was the commonest evidence of local damage" while other neurological changes only came when the lesions took on a tuberculoid character. The patients were diagnosed as indeterminate leprosy on these clinical grounds which I feel many dermatologists would consider to be insufficient for a hard and fast diagnosis. Specimens taken for histopathology from "selected patients showed all gradations of pathology from a non-specific scanty round-cell infiltration to the typical tuberculoid picture."

Attempts to find more help only lead to further confusion. In 1971, Dr. Fajardo (3)

studied 54 cases of indeterminate leprosy in which the diagnosis was "confirmed by finding AFB in 42 cases." He followed 21 of these cases which "remained clinically indeterminate" and treated them for 3 years at the end of which time 17 were moderately improved. So while in the Congo thousands of cases are self-healing, in the Philippines indeterminate leprosy does not even get better with three years of therapy. Khanolkar (5) says that in India three quarters of them get better spontaneously.

You will see that when I started going into this, things became more and more difficult, and I began to suspect that in different countries the words meant different things.

At the Round Table on Indeterminate Leprosy in Rio (6) a report said "it may evolve to other forms of the disease but sometimes may regress" (only sometimes!). Clinical signs, the Round Table pointed out, include *frequent* impairment of sensation, bacilli are *usually* absent, and there is a *non-specific* histology. It seems therefore that some people can be diagnosed as leprosy when there is no anesthesia, no classical clinical appearance, and a non-specific histology.

Binford (1) has written, "when histological changes in a skin biopsy are indeterminate and the possibility of leprosy is considered, all small nerves should be searched for acid fast bacilli." Obviously, if they are found, leprosy should be diagnosed, but what if they are not there?

Ridley tried to help (7) by defining indeterminate leprosy as unclassifiable leprosy. He classified this into four groups in three of which AFB were found in a proportion of cases. He then pointed out that proliferation of histiocytes around hair follicles is not conclusive evidence of leprosy but "for the purpose of this study may be regarded as confirming a clinical diagnosis." Now we find a situation where inconclusive histological evidence is used to confirm a diagnosis based on inconclusive clinical evidence. It is obvious that some people use the phrase "indeterminate leprosy" to describe an early leprosy they cannot clas-

sify and other to describe a lesion they cannot diagnose.

Of course most patients in the papers I have quoted really did have leprosy, but it seems possible that some have been diagnosed and even treated as leprosy when they did not have the disease. If a patient is seen with a hypopigmented lesion that is not diagnosable, leprosy should be included in the diagnosis and the patient watched. If and when such lesions turn into recognizable leprosy, they can be treated. I feel that no other group of responsible doctors would initiate a treatment for an infection in the *absence* of firm clinical evidence, histological confirmation, and bacterial positivity.

In a rather provoking book about Christian theology a few years ago, an Anglican Bishop actually suggested that the word "god" should not be used for a generation because it had so many different connotations. I feel I am in good company therefore when I urge that, because of the long history of confused thinking that has been associated with it, the term "indeterminate leprosy" should be banished from our vocabulary and that the diagnosis of lep-

rosy not be made without *proof* of the disease.

—John H. S. Pettit, M.D., F.R.C.P.

Room 303

China Insurance Building

174, Jalan Tuanku Abdul Rahman

Kuala Lumpur, Malaysia

REFERENCES

1. BINFORD, C. H. The histological recognition of the early lesions of leprosy. *Int. J. Lepr.* **39** (1971) 225–230.
2. BROWNE, S. G. Self-healing leprosy: report on 2749 patients. *Lepr. Rev.* **45** (1974) 104–111.
3. FAJARDO, T. T. Indeterminate leprosy—a 3-year study. (Abst.) *Int. J. Lepr.* **39** (1971) 94–95.
4. GANAPATI, R., NAIK, S. S. and PANDYA, S. S. Leprosy among schoolchildren in greater Bombay. *Lepr. Rev.* **47** (1976) 115–125.
5. KHANOLKAR, V. R. Pathology in leprosy. In: *Leprosy in Theory and Practice*. 2nd ed. Cochrane, R. G. and Davey, T. F., eds., Bristol: John Wright and Sons Ltd., 1964, p. 125.
6. Report of round-table on borderline and indeterminate leprosy. *Lepr. Rev.* **35** (1964) (Suppl.) 15–17.
7. RIDLEY, D. S. Pathology and bacteriology of early lesions in leprosy. *Int. J. Lepr.* **39** (1971) 216–224.