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EDITORIALS

Editorials are written by members of the Editorial Board, and opinions expressed are those of the writers. Any statement that does not meet with agreement will be of service if it but stimulates discussion, to facilitate which the Correspondence section is maintained.

THE BACTERIOLOGICAL EXAMINATION

To provide refuges where persons with leprosy may seek asylum for sustenance and shelter, even though circumstances may preclude dealing with them as hospitalized patients and attempting to alleviate or cure their disease, is a worthy activity. But it is humanitarian, not medical; it is working for lepers, not with leprosy.

For work of the latter category the simplest set-up is the out-patient treatment clinic. In the last ten years or so this has come to take an important place in the antileprosy campaign. Even where adequate leprosaria are provided for the presumably infectious cases, the clinic is needed for the treatment of those that do not require isolation and for the after-treatment of those who have been released from isolation. In many places circumstances limit antileprosy activity largely or wholly to clinic work in spite of its inherent limitations. All too often inadequacy of resources and personnel has made such work unfortunately superficial.

To put leprosy treatment on a sound medical basis there are certain minimal requirements, aside from suitable quarters and the

equipment and materials needed for giving treatment. So obvious are the needs of expert diagnosis, especially in early and slight cases, the recognition and correction of intercurrent ailments, hygiene improvement of living conditions, and the individualization of the patients with regard to special treatment, that these hardly need mention. But it is perhaps not so obvious that the cases once diagnosed should be classified correctly, whether the basis of treatment be inpatient or outpatient, routine or research, and whether the physician's services be part-time or full-time and the records sketchy or complete.

Clinical classification is necessary in order that the treatment may be adapted to the case, and that the results of treatment may be evaluated correctly. What amounts to bacteriological classification is necessary in order that the patients may be dealt with properly from the administrative viewpoint—where they are dealt with at all from that viewpoint—for though different governments will arrive at different methods of handling cases, dependent upon local conditions,¹ it is at least necessary to know which cases are "closed" and which "open." Whether it be for the clinical or the administrative classification, the regular, routine use of a suitable standard bacteriological examination is called for, and that fortunately does not require elaborate or expensive equipment.

In spite of that fact, and of the simplicity and relative ease of the examination, surprising failure of performance is sometimes encountered. This is touched upon briefly in an article to appear in the April number of *Leprosy Review*, which deals chiefly with technique. In some instances, perhaps, the clinicians consider it a measure which they are not prepared to carry out; they may look upon it as a laboratory procedure outside of their proper domain. Or it may be that some consider it unnecessary, believe that mere inspection suffices to distinguish between the bacteriologically positive, cutaneous cases and the bacteriologically negative, neural ones. Either view, it is submitted, is incorrect. The procedure should be looked upon as a part, and an essential part, of the *clinical* work, regardless of whether it is actually done by a bacteriologist, or by the clinician himself, or by some minor assistant—the training of whom, given ordinary intelligence, is not difficult.

¹ See *Prophylaxis of Leprosy*, a report of the Leprosy Commission of the Health Organization, League of Nations, reprinted in this issue of the JOURNAL.

As regards the necessity of making the examination, if any argument is necessary, one may first recall the fact that some clear-cut neural cases, with no evidence whatever of lepromatous skin lesions, give positive nasal smears and so should be dealt with administratively as open cases, and clinically should have the nasal condition attended to. It is also to be noted that many cutaneous cases which have become negative in the skin as a result of treatment have residual, persistently positive nasal lesions. This was found several years ago to be the case at Culion, at least,² and has necessitated special measures ever since.³

Of greater importance, perhaps, than these considerations is the fact that there is a class of lesions which in their gross clinical appearances are deceptive. Being frankly infiltrated and active, they may be—and unquestionably often are—taken to be “cutaneous,” of the bacteriologically positive, lepromatous type, whereas actually they are tuberculoid and typically negative bacteriologically, the cases characterized by them evidently belonging to the relatively resistant neural type.⁴ It is obviously wrong to lump together two groups of cases which are fundamentally different as regards resistance to the infection.

As for the examination itself there is general agreement concerning the tissues from which the specimens should be taken, the standard methods involving only the skin and nasal mucosa. The former is decidedly the more important because many cases with positive skin lesions are negative in the nose even when material is taken properly. However, for taking material from the skin two methods have been evolved. Originally the only recognized method was the removal of tissue for sectioning, a measure which would be limited in application by technical difficulties if there were no other objections to it. So far as has been learned the first report of a smear method was made in 1897, at the Berlin conference, by Alvarez of Honolulu.⁵ This method was a modification of the one then current,

² Wade, H. W. and Solis, F. Studies on negative lepers. II. The importance of nasal lesions. *Jour. Philippine Islands Med. Assoc.* 7 (1927) 111.

³ Samson, J. G. and Lara, C. B. Persistence of nasal lesions in leprosy. *Jour. Philippine Islands Med. Assoc.* 9 (1929) 201.

⁴ Wade, H. W. Tuberculoid changes in leprosy. IV. Classification of tuberculoid leprosy. This JOURNAL 3 (1935) 121.

⁵ Alvarez. Discussion in Mitheil. u. Verhandl. Internat. Wissensch. Lepra-Conf., Berlin, 1897, vol. 2. p. 120.

tissue being removed surgically but utilized rather laboriously to make smears.

One of the two methods in use today, the so-called snip method, is a modification of this. A fold of tissue, as the margin of the ear, is pinched and a fragment snipped off with scissors; this is held with forceps and the raw surface smeared on the slide. Or, to meet the objection that this unduly disperses the material over the slide and so prolongs the examination and increases the danger of missing bacilli when they are few, the epidermal side of the fragment may be laid on the slide, the raw surface scraped with a scalpel, and a more concentrated smear made with the material so obtained. It has been claimed that the snip method gives a higher percentage of positive findings than the scraped incision technique.*

The other method, by which material is obtained directly from a small incision in the skin, is the writer's modification of a procedure long in use. Instead of using the bloody material that ordinarily exudes from a cut, as was the older practice, care is taken to avoid blood so far as possible and a small quantity of actual tissue-pulp is scraped from the depth of the incision and placed on a small area of the slide, thus providing a concentrated smear that is examined in minimal time and with minimal danger of error. It is claimed that, though where bacilli are very scarce this method may be slightly less accurate than the other in a *smear-for-smear* comparison, it is more accurate in an *examination-for-examination* comparison. The reason is that it is so simple and so slightly disturbing to the patient that in a single examination as many smears may be taken, from as many lesions, as may be desired, and that this may be repeated as many times and as frequently as necessary, with no mutilation of the patient.

As to which of these methods should be adopted as standard, this is perhaps a moot question. The Leonard Wood Memorial Conference remained neutral, and in the appendix of its report[†] gave details of both without discussion. However, regardless of which technique may be preferred, it would be difficult to imagine any other single element that would so improve the basis on which leprosy work is done as the general adoption of regular, systematic bacteriological examinations. The different atmosphere that surrounds the work where such examinations are made is evident to the patients themselves. The expense involved is small—a simple microscope (preferably with a mechanical stage), a few staining jars, and a few simple

*Lowe, J. and Christian, *Indian Jour. Med. Res.* 19 (1932) 867.

†Report of the Leonard Wood Memorial Conference on Leprosy. Appendix I. *Philippine Jour. Sci.* 44 (1931) 449. Reprinted in this JOURNAL 2 (1934) 329.

solutions* are the principal items of equipment. As for the extra labor involved, in most places reasonably intelligent, low-salaried helpers can, as said, be trained to take the specimens from spots marked by the examiner, stain the smears, and even examine them. Be that as it may, the time will come, and it may be hoped that it will come soon, when no one will seriously attempt to diagnose and treat leprosy without routine use of a standard bacteriological examination.

PUBLICATION OF "PRELIMINARY SUMMARIES"

A suggestion has been received that it would be advantageous, at least in some cases, to follow the example of certain other scientific periodicals and publish, on request, a brief summary of an article in hand in the first issue following its receipt. The reason for this suggestion is that frequently there is, quite unavoidably, a considerable delay in publication of articles in a periodical which appears at relatively long intervals. In some cases it is important to an author to have at least a summary of his article published with as little delay as possible, especially when a question of priority may be involved.

After due consideration, having in mind the suitability of the recently inaugurated Brief Reports section for such preliminary summaries, the Editorial Board has decided to offer this service to the contributors of the JOURNAL. A few pages will be reserved in each issue for that purpose, and the printing of that section will be held as long as possible to permit the insertion of summaries as received. It is to be understood that this will be done only on request by the author, and only when a suitable summary is supplied by him. These summaries should not exceed one printed page in length.

A proposal has been submitted to the General Council of the International Leprosy Association recommending that the interval of publication of the JOURNAL be reduced from three to two months. The object of this is, in part, to reduce the time required for publication of articles. However, that proposal may not be found practicable, but whether it is approved or not it is hoped that the service here offered will be found advantageous.

*This should include a bottle of 10 per cent basic fuchsin in 90 per cent alcohol and another of 5 per cent phenol in water, from which a fresh staining mixture can readily be made up (1:10) as required by precipitation of the old. For decolorizing and counterstaining, Gabbett's solution is the simplest and can be recommended.