

## CORRESPONDENCE

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

### NERVE ABSCESS IN LEPROMATOUS CASES

In a paper on tuberculoid leprosy read by Dr. William Hughes, of Singapore, at a meeting of the Royal Society of Tropical Medicine and Hygiene on December 9, 1937, he stated that "necrosis...is the basis of nerve abscess, which must be regarded as part of tuberculoid leprosy." In the discussion of this paper Dr. C. J. Austin, of Fiji, questioned the view that "owing to the less response or reaction of the nervous tissues" in the lepromatous type of leprosy nerve abscess does not occur in that type. He had twice encountered abscesses at operation in lepromatous cases. Dr. E. Muir, of London, stated that he had seen the condition in three or four cases and expressed the opinion that when it occurs it is probably in a case that was originally of the neural type, with a caseous nerve lesion, that had later advanced to the lepromatous type and subsequently, during lepra reaction, suffered liquefaction of the old caseous nerve lesion with resultant abscess formation.

As the matter seemed to be of some interest, both practically and theoretically, the Editor wrote to Drs. Austin and Muir essentially as follows:

Regarding your statement that nerve abscess may occur in lepromatous leprosy, I quite agree because I have seen such lesions. In the booklet written with Rodriguez is a picture of nerves two of which each contained an abscess of a sort at the elbow; these were found in the autopsy room here at Culion quite unexpectedly in a lepromatous case, the condition being bilateral. I have also histological material obtained from the operating room when the surgeon opened such an abscess to relieve pain. But in both cases the condition, macroscopically, histologically and bacteriologically, differed fundamentally from that which occurs in neural cases. Bacilli were abundant; the histology though unusual was essentially of lepromatous nature and not tuberculoid, and there was no caseation necrosis. I would say that nerve abscess in the cutaneous type is an acute condition, undoubtedly due to a lepra reaction phenomenon, whereas the abscess condition that occurs in neural cases is analogous to the "cold abscess" of tuberculosis—though it may warm up in acute (tuberculoid) reaction. Any

information that you can give along these lines about the cases you mention will be of interest.

The replies that were received follow:

*Reply from Dr. C. J. Austin, Makogai, Fiji:* With reference to my two cases of nerve abscess in cutaneous leprosy, I think that you are probably correct in speaking of them as acute conditions, rather than as examples of the more usual "cold abscess" type. In each case I came upon the abscess unsuspectingly, while operating on what I thought was an ordinary acute neuritis to afford release from tension by removing a portion of the sheath. I am afraid that I was so interested in meeting them—nerve abscess is in my experience here quite unusual—that I failed to note that they were not of the classical type. It was the unusualness of the occurrence in the cutaneous type of leprosy that attracted me, and for that reason I did not even make smears from the purulent material that the abscesses contained.

To illustrate a condition that might possibly be mistaken for nerve abscess, I might cite a case in a young Indian boy who came to me last week complaining of pain in the neck. He had a discharging swelling immediately over an enlarged great auricular nerve, and the lesion had the appearance of a not atypical nerve abscess. Further investigation, however, revealed a horribly septic last molar tooth, which I removed under evipan anesthesia. This "nerve abscess" is now considerably better. It was probably a secondarily infected gland in a rather unusual situation, attached to the nerve sheath.

Since my return last year from leave and my visit in India, where I was able to see a number of nerve abscesses, I have been particularly on the lookout for the more chronic type. So far, however, I have not seen a single specimen, though more than one-third of our patients are East Indians.

*Reply by Dr. E. Muir, London:* The most striking instance of nerve abscess in a case of leprosy of the lepromatous type that I can recollect clearly is Case 8 of the article entitled "A study of nerve leprosy" by Dr. Chatterji and myself, published in 1936 [*Indian Jour. Med. Res.* 24 (1936) 119-138]. I was at a loss to classify that case. All five of the abscesses were in nerves. I saw the pus from two or three of them and, as far as I can recollect, it was white like that which is found in a cold abscess in tuberculosis, or in the usual nerve abscess in neural leprosy. The case was distinctly L2, and I called it L2-N2 (actually C2-N2) because of the very marked thickening of the nerves. My recollection is that the history was of neural leprosy to start with, and that manifestations of the lepromatous form of the disease were superimposed. However, I did not make sections of the nerves in this particular case and am not at all positive in the matter.

Certainly there is a great difference between the abscesses that form in nodules in lepra reaction and the condition which occurs when the skin breaks down in acute reaction of major tuberculoid cases. The ordinary nerve abscess in neural leprosy corresponds to the latter, but I cannot recall seeing a nerve abscess which corresponded to the former—that is, which

contained pus filled with leucocytes, most of them crammed with bacilli, such as is found in the abscess of a skin nodule. I see no reason, however, why that should not occur.

In the case referred to the abscesses were not, as far as I could judge, of that nature, nor did the patient show at the time signs of breaking down of skin nodules such as one would have expected had the nerve abscess itself been purulent. I think that this is a point that requires further investigation. The difficulty is that such cases occur very seldom.