EARLY TENDERNESS OF MEDIAN NERVES

TO THE EDITOR:

I am writing this letter with reference to the one of Dr. J. J. Joseph, published in THE JOURNAL **17** (1949) 117, inviting the opinion of other leprosy workers regarding his findings of tenderness of the median nerves in early leprosy. He stated that he finds bilateral tenderness of those nerves in cases with incipient or prelepromatous macules in any part of the body, and he correlated this sign with this particular type of skin lesion and with the results of the lepromin test.

We in the Calcutta clinic, have failed to corroborate his findings. In this clinic, as a routine, we look for thickening and tenderness of nerves. The median nerve is sometimes found thickened and tender—usually, however in the lower part of the forearm, although tenderness can occasionally be elicited in the upper part of the forearm as indicated by Joseph. But a nerve is usually found thickened and tender when there is a lesion patch or an area of anesthesia in its region of distribution. Dr. Joseph did not mention whether or not there were skin lesions in such relation to the nerves which he found tender.

Sometimes a nerve supplying a patch may not be definitely thickened, whereas tenderness can be elicited by gentle percussion over it, as can be well demonstrated when the lesion is on the forehead by percussing over the supraorbital notch. There is a correlation between the activity of the skin lesion and tenderness in affected nerves. But we have failed to corroborate the statement that tenderness of median nerves is found in cases having incipient (or simple) lesions, or in prelepromatous or early lepromatous cases where the lepromin test is probably negative, and not in minor tuberculoid or early neural cases where the lepromin test is probably positive.

In a personal communication Dr. Joseph has informed me that he found "bilateral tenderness of the median and radial nerves in certain types of early leprosy, particularly the neuromacular, with active multiple or progressive lesions on any part of the body, and in a few L2 and L3 and neuroanesthetic cases,"

and that he failed to establish a correlation between this sign and the lepromin test. This is not in keeping with his original statement.

It is a fact that tenderness of an affected nerve sometimes suggests that the disease is becoming active, i.e., just before the onset of lepra reaction. At that time not only the affected nerves but also skin lesions become hypersensitive. But not all cases pass on to the lepromatous type. A hypopigmented or simple lesion, when it becomes slightly more active, may turn into a minor tuberculoid; and at that time it becomes more sensitive to percussion, and the nerve supplying it may become tender. Similarly a minor tuberculoid lesion may become major tuberculoid, and then it becomes hypersensitive.

A nerve may be very thick but not very tender, whereas a less thick nerve may be more tender. This is because there is a correlation between the activity of the disease in both the skin lesion and the nerve. In the quiescent phase a nerve may be slightly tender but just before the onset of reaction it becomes more so, and in the phase of reaction it may become acutely inflamed and painful. Therefore, we fail to understand why there should be bilateral tenderness of median nerves and sometimes of radial nerves only and not of other nerves.

Joseph found the median and radial nerves tender below the level of the epicondyles. These nerves are not easily palpable in this place. But he did not mention whether these nerves were also tender near the wrist, where the nerves are superficial and are usually found thickened when there are skin lesions in their areas of distribution. In his communication to me he stated: "Moreover, this sign is not pathognomonic of leprosy alone... Typhoid cases in the third week, some fever cases said to be kala-azar, a few pneumonia cases in the acute stage, and some secondary syphilitic cases, and a boy of 12 with melanoderma (W. R. +), also responded to this test." This being the case, the condition evidently has no diagnostic or prognostic significance or any other special value in leprosy.

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