A CASE OF NEURITIS OF THE LATERAL FEMORAL NERVE

By H. W. Wade, M.D.

From the Leonard Wood Memorial Laboratory, Culion, Philippine Islands

In the April, 1934, issue of *Leprosy in India* there appeared an article by Sittig, of Prague, descriptive of a condition designated neuritis of the lateral femoral nerve, also called in Germany Bernhardt's disease.[1] This article was accompanied by an editorial comment to the effect that several cases of that condition had been encountered (in Calcutta) in connection with leprosy diagnostic work and that though they had not been diagnosed as leprosy they had nevertheless caused some puzzlement. The article gave what is probably the explanation of a case which the present writer had seen from time to time for a considerable period, and which had caused him and his clinical colleagues some difficulty. It is offered as an example of a fairly closely observed case occurring in a person who should be able to observe and recount with some accuracy at least the main features of the course of events.

[1] Sittig, O. Neuritis of the lateral femoral nerve. *Medical Press and Circular* (1933) Supplement No. 3, Neurology in General Practice; reprinted in *Leprosy in India* 6 (1934) 89; reprinted in condensed form in this issue of the Journal.

The existence of an area of hypoesthesia with paresthesia in a patient is usually considered very suspicious of leprosy, especially in one who has been or might have been exposed to the disease. In fact, so important is anesthesia (or hypoesthesia) in leprosy that such evidence would in all probability lead many physicians to make that diagnosis positively. Until recently the writer was not aware of any other condition that might give such symptoms and that should, consequently, be borne in mind in leprosy diagnosis, and the same is true of at least some of his colleagues.

CASE REPORT

The patient was a middle-aged man who had been in a rather run-down condition for some time. Having actual connection with leprosy work he was undoubtedly quick to notice in himself anything that might be considered evidence of that disease, but that he was not unduly apprehensive on that score is indicated by the fact that some months elapsed before he sought advice after the appearance of the first symptom. This was a paresthesia occurring on the anterior surface of the right thigh. The patient could not tell whether it had developed gradually or rapidly before he really noticed it, though he suspected that it came on in a fairly short time. Only a few weeks previously he had had an acute lumbar myositis for a few days, following which several chronically diseased teeth were extracted. Further, some three months after the onset of the neuritis he had an attack of acute pleuritis which, however, was of limited extent and lasted but a few days. He then took active measures to improve his general condition and thereafter continued in good health, at least as long as he was under the writer's observation.

The paresthesia when first consciously noticed was a strong sensation described as a peculiar feeling of "cool heat," as if menthol had diffused through the clothing; but the patient had carried no menthol and the affected area only began at about the level of the lower end of the trousers pocket. From time to time he found himself rubbing the area through the clothing, thus relieving somewhat a slight tingling feeling of irritation. However, the condition was not particularly obtrusive, and on the whole little thought was given it.

Beginning a month or two after the commencement of this condition the patient had occasion to be much on his feet for more than a month, and the area in question soon began to ache dully. This began somewhat sooner each day and was intensified from day to day until at its maximum it was a distressing heavy, burning ache, rather a bruised feeling that amounted to real pain. Very shortly a similar condition of less degree developed in the same area of the left thigh, at first with something of the menthol sensation and then the dull, painful heaviness. The inclination to rub the parts vigorously was strong, but there was little impulse to scratch. The discomfort would be relieved to a considerable degree by resting, especially if the feet were elevated,

and it would subside very considerably over night. The areas affected were somewhat hyperesthetic to touch, sometimes with a little tingling, but as no effort was made to test the area in any way the patient can give no details of this. At this time, it seems, he deliberately avoided giving the condition serious thought, for though he evidently had the possibility of a leprous neuritis in mind he realized that if it were that infection there was nothing special that could be done about it at so early a stage.

Returning to his normal, more sedentary occupation, the local condition improved. However, his general health led him to take a few days holiday, and then for the first time he tested, though crudely, for acuity of sensation. This test he discontinued abruptly on finding that light touch could not be detected over an area of some size, and shortly afterward he sought advice. Before he could do this, however, he had a ten-day period of low grade fever, at the outset of which there was for a few days a somewhat sensitive swelling of the axillary lymph nodes that caused considerable discomfort, and it was shortly after this that the attack of acute pleuritis occurred.

Consultations with senior clinicians at Culion and Cebu were arranged during the next two months. During this period there was no development of note; the hypoesthesia remained and the paresthesia to a slight extent, most noticeable at the inner margin of the area on the right thigh as a dull discomfort, apparently difficult to characterize but described as a feeling of warmth, usually with some prickling, and some hyperesthesia to touch, bringing to mind the advancing margin of a neural macule. As outlined by the patient the area on the right thigh was mostly on the anterior surface, extending backward as described by Sittig, but also extending to the left of the midline for about three inches. The upper end was nearly eight inches below the anterior superior spine of the ileum, the lower end just above the knee. There was no visible abnormality. Repeated examinations to determine sensory change revealed within the affected zones several relatively small irregular areas—some on the left but mostly on the right—that were insensitive to superficial, light touch and also showed some disturbance of temperature perception, but no loss of sensitiveness to pain. The histamine test, which is not expected to be diagnostic but is often helpful, was applied repeatedly. The flare was found to be abolished over the insensitive areas; a prick made just outside such an area would sometimes show the typical abrupt interference at the edge, but in other instances the demarkation was not clear-cut. Bacteriological smears were not made because of the absence of any visible change.

Diagnosis.—Unaware as we were of any other condition that might produce just such a condition, some of us were inclined to make a tentative diagnosis of incipient leprosy. However, chiefly because the absence of real anesthesia (pinprick) did not coincide with experience with incipient cases in his clinic, Dr. Rodriguez, of Cebu, came to the conclusion that the condition was not leprosy. This negative opinion was accepted, for it was agreed that even if it were leprosy there was nothing special to be done in the way of treatment, since experience with chaulmoogra treatment at such a stage did not justify advising

it. In the year and more that the patient was under observation after that there were no developments to cause disturbance. The affected area did not increase nor did the symptoms otherwise become aggravated though on the other hand they did not clear up completely, the hypoesthesia and to some extent the marginal paresthesia persisting.

Discussion.—In its main features this condition agrees entirely with that of neuritis of the lateral femoral nerve as described by Sittig. The points of resemblance are notably the earlier sensation of coolness; the relation of the painfully aggravated state to standing and walking; the secondary importance of disturbance of sensory perception, at least as compared with leprous neuritis, which would doubtless have produced anesthesia to pain; the distribution of the disturbed area, except for the apparently unusual extension inward from the midline of the thigh, which may merely signify an abnormality of distribution of the nerve; and the absence of surface changes and of extension of the area once it became definitely established. Furthermore, the events at about the time of onset, which indicated a state of low-grade infection of some kind, are in agreement with the ideas of the etiology of the neuritis. Therefore, though it was impossible to give the patient an absolutely positive clearance in the matter, leprosy being notoriously irregular and frequently slow in its development, it seems in the highest degree probable that the condition was actually due to lateral femoral neuritis.