

CASE REPORT

Ulnar abscess: 4 months after release from control with paucibacillary–multidrug therapy

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A 14-year-old girl was diagnosed as having borderline–tuberculoid leprosy. Paucibacillary multidrug (PB-MDT) was started and she completed treatment in 6 months. During the period after release from treatment (RFT) there were no complaints. Two years after (RFT) she was released from control (RFC). Four months after RFC she presented with swelling in the left hand above the elbow of 15-days duration.

There was a history of fever from the onset of swelling, and of pain at the site of swelling.

The swelling was situated on the medial side of the left arm 4 cm above the left elbow. There was no pulsation seen. On palpation the skin over the swelling was warmer compared with the surrounding skin. It was tender and the consistency soft. It was not fixed to the overlying skin or underlying structures, and movable more freely horizontally than vertically.

There was loss of sensation over the little finger and motor weakness of the abductor digiti minimi, apponens digiti minimi and flexor digiti minimi. A skin smear was negative. A diagnosis of ulnar nerve abscess was made and steroids were started, with prednisolone 30 mg once a day.

The patient improved within a week and the fever and pain reduced. Thirty milligrammes of steroids were given for 2 weeks, 20 mg for 2 weeks, 10 mg for 2 weeks, 5 mg for 4 weeks, and 5 mg on alternate days for 4 weeks. The nerve abscess responded well to steroids and at the end of the 14th week the swelling was less than 3 mm in size. Surgical intervention was thus not necessary, and motor power had also improved.

In this case because the abscess was treated initially with steroids the need for surgical intervention was prevented. Thus the use of steroids is a useful means to treat nerve abscesses and should be tried before surgical intervention.

Discussion

The cold abscess type of nerve lesions in leprosy are usually associated with neural or tuberculoid cases and is caused by liquefaction of the caseous nerve lesions. Leprea reactions are one of the main causes of abscess formation.

It is recognized that in BT and TT leprosy, caseation necrosis occurs in major nerve trunks

as well as on occasion in the skin.¹ It is probable that caseous necrosis occurring in leprosy is due to delayed-type hypersensitivity reaction and is directed to antigens of *Mycobacterium leprae* (1).

History and clinical presentation of the problem is more in favour of a localized nerve pathology probably a 'segmental necrotizing granulomatous neuritis'. There seems to be a predilection in the occurrence of ulnar nerve abscess in the right side,¹ 3–4 inches above the elbow joint.^{1,2} In this case the swelling reduced to the size of a 3-mm nodule with steroid therapy. When the swelling had reduced, it was found to originate from the ulnar nerve. This implies that the pathology is from the ulnar nerve. The condition which commonly masquerades as nerve abscess in leprosy is semi-membraneous cysts.³ The usefulness of steroid therapy in the treatment of leprosy nerve abscess is demonstrated in this case report.

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References

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