pain in the calf muscles or in one or more of the big joints—more often of the legs, and restlessness; the face was flushed and the conjunctivæ injected, the tongue coated, bowels constipated and appetite impaired. The maximum temperature, which was generally attained on the second day of fever, varied ordinarily between 101 to 102°F, but in a few cases it went up to 103 or 104°F. The temperature usually dropped down to normal on the third day leaving the patient very weak and depressed. In a few cases there was a second accession of temperature generally a day after its coming down to normal,—thus resembling the saddle-back temperature of dengue, although no rash could be noticed. In some cases there was a slight cough but in none was there bronchitis or any affection of the lungs. In a number of houses several cases occurred either simultaneously, or the cases followed one another in quick succession. The prodromal symptoms usually were slight malaise and muscular pain. The epidemic was rather a short one and abated greatly by the end of the month (i.e., June). The doctors who treated the cases were positive that it was an outbreak of influenza.

Under instructions from Lieut.-Colonel W. C. Ross, I.M.S., Chairman of the Patna Administration Committee—as the Municipality of the new capital of Bihar and Orissa, is officially called—I, as health officer, made an investigation into the outbreak and collected all available information as to temperature, symptoms and signs of almost all the cases that occurred in Patna.

I also personally saw a few cases. The outbreak, however, did not appear to be one of influenza as there were no respiratory symptoms. As the symptoms of three-day fever and dengue are closely alike it is quite likely that a few of the cases, especially those having a second febrile attack and lasting for 5 or 6 days were dengue with a rash which was probably of such a nature as not to attract attention. Only in one case—a European—seen by Colonel Ross was the rash characteristic of dengue noticed.

I may add here that a similar epidemic occurred last year in July and on both these occasions sand-flies were noticed in the town in large numbers. The facts stated above led me to infer that most of the cases were of three-day (or pappatasii) fever.

My object in writing this note is to invite the attention of the profession to the probability of the three-day fever being more prevalent than it is generally supposed to be, and it is also very likely that many such cases are misdiagnosed and put down as influenza.

[NOTE.—The above interesting note illustrates the difficulty which is often experienced in placing an outbreak of short fever in the suitable class. The epidemic described by Dr. Das conforms more closely to sand-fly fever, or as I would prefer to call it "sand-fly-dengue" than to any other disease, but some of the cases are indistinguishable from classical dengue with a rash or two-phase fever. Most of the cases seen in the recent outbreak in Calcutta correspond exactly to those seen by Dr. Das, but the frequent occurrence of the secondary fever and rash and the association with stegomyia prevalence go to show that the disease is mosquito-dengue. Once again it must be repeated that we do not yet know whether there is any essential difference between the virus of dengue and of sand-fly fever.—ED., *I. M. G.*].

A Mirror of Hospital Practice.

NERVE ABSCESS IN LEPROSY.

By Dr. E. MUIR, M.D., F.R.C.S., Ed.,

Leprosy Research Worker, Calcutta School of Tropical Medicine.

I AM not aware that a nerve abscess has been described before in connection with leprosy, so that the following case may be of some interest.

History.—In February, 1923, ten months before I saw the patient, he first noticed a red patch slightly raised, on the inner side of the upper part of the right forearm. At first the patch was about twice the area covered by a rupee, but it gradually increased in size and, when I saw the patient in December, 1923, there was a patch 6 inches by 4.

When the patient first noticed the lesion it was hyperæsthetic and a painful sensation was elicited on lightly tapping the arm just above the patch. Three or four months later the patch became devoid of sensation and at the same time the patient noticed two swellings about the size of peas, one just above the medial epicondyle and the other about two inches higher up the limb. The lower nodule gradually enlarged while the higher one remained stationary. The patient was not caused any considerable pain or inconvenience by the lesion.

During the early part of this history the patient was in Mesopotamia and was in indifferent health. He came back to India and found work in the mines in Bihar. At the time when I first saw him his general health was good.

State on examination.—The patient came complaining of a swelling above the inner side of the elbow and anæsthesia below the elbow.

On examination I found a hard swelling superior and external to the right medial epicondyle. It was about the size of a pigeon's

egg, and fluctuated on hard pressure. The skin was not adherent. The swelling could be moved from side to side under the skin but not in an upward and downward direction. There was a small, hard nodule about an inch and a half above this swelling, rather larger than a pea in size. Between these two swellings and extending right up the limb to the axilla there was a thickened cord in the position of the medial cutaneous nerve.

Below the elbow there was an area 6 inches in length and 4 inches in breadth along the medial side of the forearm the appearance of which differed distinctly from the surrounding skin. The surface of the skin showed a glossy, cracked appearance due to parakeratosis, when I made the patient shut his eyes he was unable to tell when I touched the part with a piece of paper, and when pricked with a pin he felt no pain in this area.

Operation.—An exploratory puncture was made into the larger swelling and yellow pus was removed. This was examined microscopically and injected into guinea-pigs. No signs of micro-organisms or of definite cells were found in the pus microscopically.

The skin over the larger swelling was infiltrated with cocaine and adrenaline and a longitudinal incision made in the long axis of the limb, over the swelling and up the nerve to a short distance. The abscess was found to be inside the outer nerve sheath of the medial cutaneous nerve. On incising this sheath about 10 c.c. of pus was voided along with a small quantity of what appeared like fibrinous matter. When the abscess cavity had been thoroughly cleansed with gauze it was found that the main nerve trunk was flattened beneath it. The nerve was somewhat adherent to the surrounding tissues. When it had been separated from these both behind the abscess cavity and for a short distance above it, the nerve was found to be rather thicker than an ordinary pencil.

On pressing on the higher swelling it gradually disappeared under the fingers and at the same time pus flowed out of a small opening in the nerve. It was found on passing a probe into the nerve through this opening that it was hollow, resembling a piece of rubber tubing for a distance of two inches. When the nerve was pressed on the patient complained of a feeling of tingling and numbness throughout the area of skin supplied by the median cutaneous nerve. The wound was stitched up and a drain placed in the lower end of the wound. The patient declared after the operation that there was less anæsthesia than before, and, on examining with a spill of paper, the anæsthetic area was found smaller than before although the centre of the area still remained anæsthetic. There was a slight discharge of pus for two days, after which there was only a slight serous discharge and the wound healed.

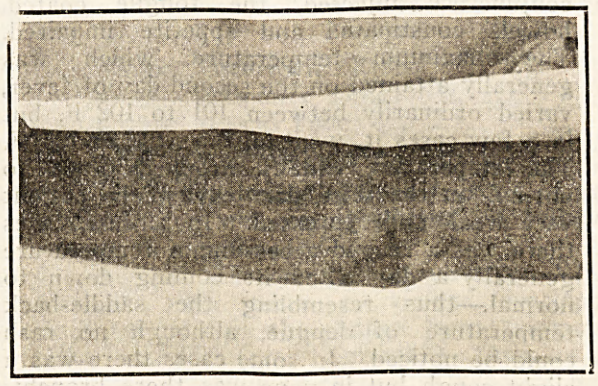

Fig. 1.

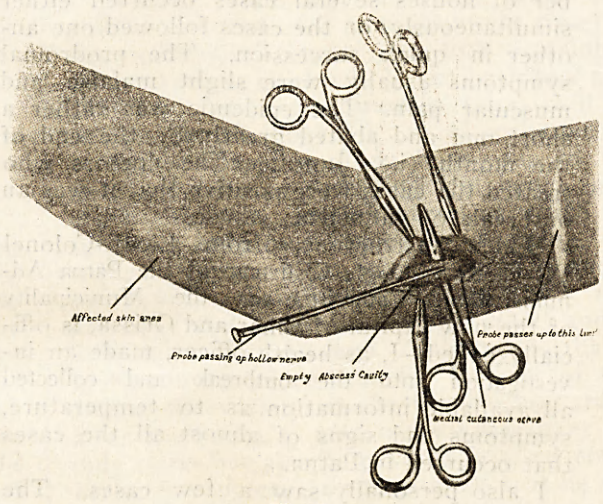

Fig. 2.

Of the two photos one was taken before the operation and shows the larger of the two swellings, the smaller being indistinct. It also shows the area with parakeratosis just below the elbow. The second photo shows the thickened medial cutaneous nerve lying on the forceps and a probe passing from the opened abscess cavity up the hollow nerve. The extent to which the nerve is hollow is indicated by the piece of cotton wool laid across the arm.

Discussion.—This is the second case with nerve abscess that I have seen, the former one having a series of four nodes of the ulnar nerve the lowest of which was found to contain pus and caseous matter when it was incised. In this case there were all the signs of ulnar muscular paralysis.

In yet another case there was very marked swelling of the ulnar nerve extending from the elbow to a point about 2 inches above the elbow where the arm was constricted by the string usually worn by Bengalis in this position to fasten on a small charm. Unfortunately the nerve was not explored or incised

in this case, but it is not unlikely that the swelling contained pus.

I am in favour of exploratory puncture in every case of marked nerve swelling in leprosy, especially when, as in the two cases mentioned above, there is no other leprous lesion in the body. Nerve stretching and nerve incision might even be found beneficial when no pus is present.

It may be questioned what was the evidence that the case described above was a case of leprosy. I consider that the onset of the lesion was too typical to leave any room for doubt.

The failure to find lepra bacilli either in the nerve or the skin part of the lesion does not interfere with the diagnosis, as bacilli are generally not found in superficially anæsthetic patches, nor are they found as a rule in nerve trunks where there is no marked congestion and pain.

It is a remarkable fact which needs explanation that extreme swelling of a nerve in leprosy frequently occurs when only the one nerve is affected and there is no other sign of the disease in the body. Why such a lesion should lead on to pus formation is still more difficult to explain.

It would appear not to be due to the virulence of the lepra bacilli or to the specially low resistance power of the patient, for in that case other lesions might be expected throughout the body.

Is it possible that the ascending nerve lesion in leprosy, which is so well illustrated in this case, is caused by a non-acid-fast form of Hansen's Bacillus (streptothrix or bacillus) which has not yet been discovered?

A CASE OF EPITHELIOMA OF THE PENIS.

By SUKH DAYAL, M.B., B.S.,

District Hospital, Kheri.

B., a Mahomedan boy aged 15 years, was admitted to the district hospital, Kheri, on the 24th June, 1923, complaining of a growth on his penis. A year and a half previously he had been circumcised by a country *jarrah*. The wound never healed, but formed an ulcer around the penis, which went on increasing in size and ultimately formed a growth somewhat bigger than a tennis ball. It was cauliflower-shaped, fungating, and bled on the slightest touch. The glans penis was completely embedded in the growth, and the urethral orifice could hardly be detected. The inguinal glands on both sides were enlarged.

The case clearly looked like one of malignant disease, although the patient's age was against such a diagnosis. A portion of the growth was removed and sent to the King George Medical College, Lucknow. It was reported to be an epithelioma with definite and numerous cell nests.

On receipt of this report, Gould's operation was undertaken and the mass removed, with total extirpation of the cruræ. The inguinal glands were also removed. The boy stood the operation very well, and left the hospital three weeks later with a marked improvement in general health.

My thanks are due to Dr. H. C. Thompson, Civil Surgeon, Kheri, for permission to publish the case, and also to Dr. Badri Prasad, L.M.P., of the Police Hospital and Jail, Kheri, for kindly assisting at the operation.

A CASE OF ALASTRIM (KAFFIR POX).

By B. K. MUKERJI, L.M. & S., Cawnpore.

THE following case, of interest as suggesting the diagnosis given above, is worthy of record, for, as far as I know, no such case has yet been noted in India.

Allah Din, Mahomedan male, aged 15 years, came under observation on 26th July, 1923, in the Prince of Wales' Hospital, Cawnpore. He was covered with a discrete sero-pustular eruption which involved the whole of the body, including the palms of the hands and soles of the feet. The mucous membranes were free. There was no umbilication and the lesions were quite unlike those usually seen either in small-pox or chicken-pox.

On admission the eruption was of four days' duration and was said to have appeared on the third day of the illness. During maturation,—if maturation can be said to have occurred,—the pyrexia, instead of remaining