and only the small stump of one of the toes remained on the right foot. The face was free from signs of leprosy.

Oscol stibium 2.5 c.cm. was injected into the right deltoid muscle on August 23rd, 4 c.cm. on the 24th, and 5 c.cm. on the 25th and 26th. As there was some diarrhoea on August 27th and 28th, the injections were discontinued until August 30th, when 4 c.cm. were given without ill effect.

On August 31st the patient was feeling very well, and all the ulcers were dry. No further treatment has been given. On September 20th the extremities were still free from discharge, and all the stiffness had gone from the patient's hands, which he is able to use freely.

I asked Dr. J. Mackay, who has had an extensive experience of leprosy, to see this case, and he was agreeably surprised to see how effective the treatment had been. In his opinion there was no doubt whatever that the departmental medical officers had diagnosed the condition correctly as advanced leprosy. The case has also been under observation by Dr. Kerr Cross and Dr. G. L. Bonnar, the Indian medical officers of Durban.

On October 18th a swab was taken from the nasal secretion, as no discharge was available, and submitted to Dr. W. A. Murray, the Government pathologist at Durban, who reported the entire absence of *Bacillus leprae*.

Naukaklia was admitted to the Indian Immigration Hospital on August 19th in a very advanced stage of the disease. She was very frail, and not expected to live long. The hair was badly infested with nits. She was very emaciated, and her fingers and hands badly ulcerated. She had lost one digit of the right thumb, two digits of the right index finger, and the top digit of the middle finger of the left hand. The toes were not affected. The whole of the back of the right hand was covered with an extensive discharging scab, possibly the result of a burn. The discharge on several of the fingers was bloodstained. In several places bare bone was showing on the extremity of the fingers.

Oscol stibium 2.5 c.cm. was injected intramuscularly on August 23rd, 3.5 c.cm. on August 24th, and 4 c.cm. on August 25th. This caused diarrhoea for two or three days, and the injections were discontinued.

On August 29th the ulcers were nearly all dry, and on September 2nd, when I asked Dr. Kerr Cross to see the case, the ulcer on the back of the right hand was covered with a fairly clean scab showing evidences of rapid healing. On September 6th, though bare bone was still protruding through the ulcers on the extremities, all the ulcers were dry, and the scab on the right hand had come away, leaving a healthy dry skin.

On September 20th the extremity of one finger showed slight discharge and another ulcer on the hand looked unhealthy, so oscol stibium 2 c.cm. was injected intramuscularly. All the other ulcers were remaining dry, the condition of the scalp was much better, and all trace of diarrhoea had gone, though the woman was remarkably frail, somewhat hysterical, and took little food.

On September 23rd, as one little finger-tip was again moist with discharge, oscol stibium 3 c.cm. was injected intramuscularly. Since then no further injections have been given, for all the ulcers have remained dry. The patient is still very weak, and not expected to live much longer; but all signs of active leprosy conditions have disappeared.

In commenting on these two leper patients Dr. G. L. Bonnar, the acting medical officer, Durban Indian Circle, states:

"On admission both were showing active signs of the disease, with numerous ulcers on the fingers and toes. Although no further treatment has now been given for over a month there has been no recurrence of the signs of leprosy, and the ulcers have completely dried up."

TWO CASES OF DOUBLE GLIOMA RETINAE.

BY

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The following two cases of double glioma retinae were admitted to the Royal Eye Hospital, Manchester, under the care of Dr. Horsman McNabb. Both cases came under treatment about the same time.

CASE I.

S. R., aged 12 months, was admitted on March 23rd, 1920. According to the mother's statement, the child seemed to notice things up to the age of six months, but since then had "been different." In November, 1919, about four months before admission, he had measles and chicken-pox. Thereafter the mother noticed he had a "glide," and about two weeks before bringing him to hospital she saw a white speck in each pupil. There was one other child in the family, a boy aged 5, said to be quite healthy.

Condition on Admission.—The child was well nourished. There was a concomitant convergent strabismus of the right eye. Both anterior chambers were shallow. The right pupil was dilated and inactive. The left was smaller than the right, and reacted sluggishly to light. In both eyes a whitish tumour was visible by oblique illumination, and blood vessels could be seen on the surface. The tension in the right eye was about + 1, and in the left normal.

Operation.—Under general anaesthesia the right eye was removed on March 24th, 1920, and the left eye on the following day. In both cases the optic nerve was cut as far back as possible. Recovery was uneventful, and on September 17th 1920, the child was still quite well.

CASE II.

Henry H., aged 3 months, was admitted on April 16th, 1920. The mother had noticed "both eyes glassy" for five days before she brought the child to hospital. There were six other children in the family alive and well. The fourth-born, however, had died at the age of 4½ years from "meningitis with fits."

Condition on Admission.—Both anterior chambers were shallow. The pupils were dilated and inactive. By oblique illumination a large whitish vascular tumour mass could be seen through the pupil in each eye. Tension *plus* in both eyes. The child's general condition was not very good, and he was fretful.

Operation.—Under general anaesthesia the eyes were removed successfully on April 17th and 18th.

On May 25th there was still a slight discharge from the sockets. The child was fairly well, his general condition being better than on admission. In September there was still no sign of any recurrence.

PATHOLOGICAL REPORTS.

S. R. A typical glioma retinae, with well-developed rosettes. The blood vessels are better developed than in the other case, and necrosis is much less in evidence. It seems a decidedly less rapidly growing type of tumour than the other.

Henry H. Both eyes show a similar condition. The tumour is glioma retinae, but showing a good deal of necrotic change, and in general a sarcomatous type of growth, with a perithelial arrangement of the special cells. The characteristic rosettes are present. On the whole, the tumour suggests rapid growth and malignancy.

These two tumours are of interest as examples of a comparatively uncommon condition—namely, glioma retinae involving both eyes simultaneously. Collins and Lawford found both eyes affected in 12 out of 60 cases of glioma, and Marshall in 12 out of 32.¹ In cases of this kind the involvement of the second eye occurs more commonly months or even years after the first, according to Parsons.¹ In both these cases not only were both eyes affected, but the disease was almost equally well developed in both eyes at the same time.

In regard to prognosis, early diagnosis is of great importance as leading to timely surgical treatment. There seems to be general agreement that if the affected eye be removed before perforation by the growth, the prognosis is fair, but that in the absence of operation or in the presence of recurrence the outlook is practically hopeless. Immediate enucleation of the affected eye is therefore essential.

In the cases described diagnosis was a comparatively simple matter. The appearance of the tumours and the shallowness of the anterior chambers were characteristic. The increased tension supported the diagnosis of tumour, and the ages of the patients were in favour of the tumour being glioma, which is an affection of early childhood.

There was no sign of extraocular extension of the growth, and six months after operation the children were still quite well.

My thanks are due to Dr. Horsman McNabb for permission to publish an account of the cases, and to Professor Dean and Dr. Dible of Manchester University for the pathological reports.

REFERENCE.

¹J. Herbert Parsons, *The Pathology of the Eye*, London, 1905.

THE late Dr. Paul Redard, director of the Furtado-Heine Dispensary at Paris and author of valuable works on orthopaedics, has bequeathed a sum to the Académie de Médecine for founding a prize of 5,000 francs to be awarded every five years for the best work on orthopaedic surgery that has appeared in the meantime. The competition is open to foreign medical men. Communications should be sent to the Secretary of the Académie de Médecine.

MR. HENRY KIMPTON announces for early publication new editions of Dr. Eric Pritchard's *Infant Education* and Dr. H. S. Crossen's *Operative Gynaecology*.