temperature was 99° F., and the urine normal. Bacteriological examination confirmed the diagnosis of diphtheria.

Treatment.—Two thousand units of antitoxin were injected, and tinct. digitalis (mj) and tinct. ferri perchlor. (mij) directed to be given every four hours.

The child passed a quiet night and next morning (April 1st) seemed better.

Onset of Hemiplegia.—At 3.30 p.m. that day he had a slight attack of coughing; no whoop was heard, but a convulsion occurred which for some minutes looked serious, then gradually subsided. Soon afterwards it was observed that the lower part of the right side of the face as also the right arm and leg were paralysed. The eyelids were now closed and resisted attempts to open them; the conjunctival reflexes were present; both eyes were turned to the left, and movements did not range beyond the middle line; the pupils were medium and reacted to light. The right angle of the mouth was not employed when the child attempted oral movements. The right arm hung limp and flaccid, the right leg was flexed, abducted, and rotated outwards; the patellar reflexes were with difficulty elicited and differed in no respect. There was hemianaesthesia of the right half of the body, with the exception of the right foot, and the upper part of the right half of the face. Later in the day and during the night there were some twelve fits of varying intensity, lasting on an average from two to three minutes. These fits were Jacksonian in character and began with turning, followed by rapid oscillations of the eyes to the right, next twitching about the right angle of the mouth, and ultimately convulsive movements of the whole body. As each attack passed off there was some coughing with expectoration, then the eyes were turned to the left and maintained there. On April 2nd right lateral hemianopsia was noted. The eyelids were now generally kept open. A number of apparently minor fits were observed, affecting only the eyes, which were turned to the right and oscillated rapidly. There were several major fits during the day, and towards evening they became more frequent. Liquid nourishment was well borne, and there were no attacks of vomiting. Ammonium bromide in 1-gr. doses was directed to be given every two hours or oftener if necessary.

After-history.—The fits recurred, though with gradually lessening frequency, until April 6th. The temperature was very erratic, at times reaching 103° F., but never for long remaining at that height. The lungs were resonant, and the urine was invariably free from albumen. The diphtherial membrane disappeared three days after admission. On April 6th the child seemed very drowsy and much weaker. The breathing was rapid and shallow, and on April 7th was of the Cheyne-Stokes type. The ammonium bromide was discontinued. On April 11th the patient seemed better. The coughing and expectoration were much diminished, but the Cheyne-Stokes breathing persisted. On the following day the paralysis of the right side of the face was no longer evident. The Cheyne-Stokes breathing was present at intervals until April 15th, after which date the child's condition steadily improved. By April 24th the hemianopsia had entirely disappeared; the right arm was at times moved from the elbow-joint, the right leg showed no signs of voluntary movement, and on feeding there was no indication of facial paralysis. Sensation had returned in both the right arm and leg; the right half of the trunk was less sensitive than the left. When the child was raised the helpless condition of the right arm and leg was very apparent. On May 3rd, thirty-three days after the onset of the hemiplegia, the child was, at the mother's request, taken home. The right leg now showed signs of returning power. The right arm was capable of voluntary movement only up to the elbow. Anaesthesia had quite disappeared. The mother informed me that prior to this illness the child could talk "wonderfully well"; on the day of discharge he could only utter an inarticulate cry. On June 7th, sixty-eight days from the date of attack, save for some weakness in the right arm, recovery was complete. The child walked well, and the mother stated the power of speech was better than before the illness.

REMARKS.

That the hemiplegia was the result of intracranial haemorrhage will, I think, be readily admitted. Diphtheria had first been diagnosed six days before the onset of the hemiplegia, so that, even if we make allowance for the diphtheria bacilli having been present for a longer interval, the possibility of toxic neuritis is excluded. Moreover the onset of symptoms of, and recovery from, the paralysis were characteristic of a central and not of a peripheral affection.

Whooping-cough had been present for six weeks; during that time the recurrent paroxysms of cough must have exposed the cerebral vessels to considerable strain, which had at length resulted in a rupture, with extravasation of blood. The right hemiplegia, hemianaesthesia, and hemianopsia, coupled with the Jacksonian character of the subsequent fits, served to show that the lesion was subdural, and that the blood clot extended over a considerable portion of the left cerebral hemisphere.

The fate of this haemorrhagic effusion must remain a matter for theoretical speculation. It may have become absorbed, and the fact that the areas which were presumably pressed on by the periphery of the clot recovered first would seem to support this assumption; it may, however, have become encysted, with adaptation of the brain and skull to the presence of this unwelcome host, and thus have led to the ultimate disappearance of the symptoms of compression and

irritation. I regret that I was unable to follow up this case further. It is well known that such children may in time become the subjects of epilepsy, or that their intelligence may remain impaired. Although complete idiocy has been recorded, more often there is only defective mental power or backwardness.

LESION OF POST-CENTRAL CONVOLUTION WITHOUT PARALYSIS.

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In C. S. Sherrington and A. F. F. Grünbaum's¹ experiments on the brains of the higher apes the electrode placed on the surface of the post-central gyrus failed to elicit movements. Large lesions also in this area caused no paralysis. Purves Stewart² stimulated electrically the human cortex behind the fissure of Rolando in the ordinarily assumed position of the leg centre without result. The following case proves that a focus of softening in the ascending parietal convolution is not necessarily associated with monoplegia.

A young man was progressing well, late in the course of a severe attack of enteric fever, when he had a transient epileptiform seizure, the probable date of the onset of the thrombosis. He regained consciousness, and was able to move all his limbs freely. He was observed to feed himself with his right hand. Three days later a sudden recurrence of general convulsions took place, which ended in death after three hours. The brain was removed within two hours of his decease. The veins of the pia mater were blocked on both sides near the fissure of Rolando. The cortex was unaffected, beyond congestion, except in one spot in the left post-central gyrus rather more than 1 cm. in diameter, about 7 cm. from the middle line, in what is usually figured as the arm area. Here the brain substance was blood-stained and very soft, contrasting markedly with the rest of the organ, which was unusually firm. Although the veins on either side were symmetrically plugged, only the group over the focus of softening was surrounded by a zone of ecchymosed pia mater, which thus suggested an earlier date for the thrombosis on the left side. The venous sinuses, veins of Galen, arteries of the base, and iliac veins, were all patent. There was no meningitis. The intestinal ulcers were all but completely repaired.

Eberth's bacillus was recovered from the spleen.

T. Fisher³ noted swelling of the convolutions beneath the obstructed veins in three of his cases, but this was not obvious in the present instance. Meningeal thrombosis is seldom met with in necropsies of enteric fever. This is the only occasion on which I have found it in 160 necropsies of those who have succumbed to this disease in South Africa.

Eugène Dabout⁴ does not appear to mention this complication in his essay on the meningeal forms of enteric fever. It seems probable that it may be the cause of hemiplegic attacks which, with great rarity, may sometimes occur. The case reported by Hödlmoser⁵ of recovery after convulsions in this fever might be explained by meningeal thrombosis, since, as Fisher has pointed out, and as the above example would indicate, the veins of the pia mater can be extensively blocked without permanent brain symptoms arising.

REFERENCES.

- 1 C. S. Sherrington and A. F. F. Grünbaum, *BRITISH MEDICAL JOURNAL*, vol. ii, 1901, p. 1857. 2 Purves Stewart, *ibid.*, vol. ii, 1901, p. 1867.
- 3 Theodore Fisher, *ibid.*, vol. ii, 1901, p. 9; and ii, 1902, p. 947. 4 E. Dabout, *ibid.*, vol. i, 1902; *EPITOME* (321).
- 5 C. Hödlmoser, *ibid.*, vol. i, 1903; *EPITOME* (2).

ON THE ALLEGED INCREASE OF DISEASES OF THE NERVOUS SYSTEM.

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THERE is a popular idea that diseases of the nervous system are increasing, and especially mental diseases; one writer describes the increase of insanity as terrible, and no doubt the rise from 87,000 to 116,000 in the number of certified insane is a very grave question for the ratepayers, and one that requires very serious consideration, both by those responsible for the legislation necessary for the proper treatment of cases of mental disease and also of those responsible for the administration of the law. The general idea is that the increase in the number in the asylums is equivalent to an