ART. VIII.—*Two Cases of Infantile Hemiplegia.* By D. J. O'CONNOR, M.A., M.D., M.R.C.P.I.; Physician to the Mercy Hospital, Cork.

INFANTILE hemiplegia being a rather uncommon form of nervous affection, and the symptoms of the disease presenting somewhat different features in different cases, the following notes of two cases that have recently come under my notice may not be without interest:—

CASE I.—J. K., male child, aged three years and three months, was admitted to the Mercy Hospital, January 23, 1906. The family history was good. The father and mother and their immediate relatives were healthy, and five brothers and sisters of the patient were quite strong. Before the present attack the child's health was good, and he could speak and walk as well as other children of his age. On June 5, 1905—that is seven and a half months before his admission to hospital—the mother noticed that the child was very cross and restless, and used frequently wake out of his sleep. The date was fixed in the mother's mind by the fact that the child's grandfather, who lived in the same house, died on that day, and she was inclined to attribute the child's illness to shock caused by seeing so many visitors in the house. On that day he could speak quite plainly, and said "grand-papa there in bed," pointing to the bed in which his grandfather had just died. Next day it was noticed that the child could not stand, the right leg giving way under him; he could not hold the cup to drink, and he could not speak. Certain negative features of the case are of interest. There was no history of measles or scarlatina, of a fall or other injury, and there were no convulsions. The mother states that since that time the child has got fatter and stronger, that there is a slight improvement in his speech, and also, she thinks, a slight improvement in the condition of his limbs. When examined on admission the right arm and right leg were found to be partially paralysed, the arm being more affected than the leg. The knee-jerk on the affected side was increased, and Babinski's sign was present. But the feature of the case that attracted most attention was a condition of tremor affecting principally the upper limb on the affected side. There

was a constant slight movement of the limb independent of voluntary effort, and even persisting during sleep. In the lower limb a similar condition was present, though here it was less noticeable. The tremor was more regular in character than is usual in these cases, and resembled the tremor of paralysis agitans. On voluntary movement, however, the muscular efforts were irregular and ataxic, and resembled the movements in a bad case of chorea. There was much weakness of the right leg, and though the patient could just stand he was unable to walk. When any small object, such as a pencil, was held before him he would always stretch forth his left hand to take it, but when told to take it in the right hand he would attempt to do so in the awkward manner I have mentioned.

This brings us to another interesting feature of the case. For while the child understood what was said to him he was quite unable to speak. When asked a question he would give a monosyllabic cry or grunt, which was quite unintelligible. The mother, however, states that his speech is not quite so bad as it was at first, and that she understands some of the words he uses. There was a change also in the child's mental condition. Previous to the attack he was quiet and cheerful. Since then he gives way a good deal to crying, and, indeed, he used to disturb the other patients so much by his almost constant whining that he had to be sent home after about a week. Considering the age of the child and the time that has elapsed since the attack, one would expect a greater improvement in the power of speech than has actually taken place. The probability, however, is that this condition will improve later on, and, perhaps, end in complete recovery. As regards the paralysis, it is too soon to speak. There was no shortening of the affected limbs at the time of examination, but even if this does not take place a considerable amount of loss of power is certain to remain.

In the second case some of the symptoms were thought to point to cerebral tumour, and the case was sent to the hospital under the care of my surgical colleague, Dr. J. Cotter, M.D., F.R.C.S.I., with a view to an opinion as to the advisableness of

surgical interference. Dr. Cotter kindly asked me to investigate the case with him. As the patient was more advanced in years than in the previous case some of the symptoms, and especially the mental condition, could be determined with greater accuracy.

CASE II.—The patient, P. S., a boy, aged nine years, was admitted to the Mercy Hospital on May 3, 1906. The parents stated that when he was three years old he got a feverish attack, accompanied by convulsions, which recurred on several occasions for some days and then passed off. There was no history of measles or scarlatina. When the convulsions subsided it was noticed that the child's left arm and leg were paralysed. As time went on the paralysis became less marked, and ultimately the boy was able to walk and run pretty well. The upper limb did not improve to the same extent, and was of little use to the patient. The convulsions have recurred at irregular intervals from the time of the original attack up to the time of admission to hospital, averaging about one every month. The remarkable feature of the case was that not only were the original convulsions general in their nature, but all the subsequent attacks have been of the same character, and not confined to the affected side. When examined on admission the boy was found to have very good power in the leg, and could walk fast and run fairly well. However, when he walked fast or ran he would drag the left leg after him with a kind of circular movement, while the fact that this leg was one inch shorter than the other caused a noticeable limp. The knee-jerk on the affected side was excessive, ankle-clonus could be obtained, and Babinski's sign was present. The left upper limb was two and a half inches shorter than the other, was flexed at the elbow, and the fingers were bent on the palm. The face was unaffected, and the electrical reactions were normal. There was no tremor or athetosis, but on voluntary efforts the movements of the left hand were of a disordered character. The absence of vomiting, headache, and optic neuritis, the sudden onset of the paralysis and its improvement as time went on, and the generalised nature of the convulsive seizures, rendered the diagnosis of cerebral tumour untenable. The mental condition of the boy was of particular interest. Under ordinary conditions

he was a bright, cheerful, intelligent lad, quick of comprehension, and ready in answering questions, though he was not as far advanced in his school studies as most boys of his age. But his emotions were very strong and very easily aroused. The day after his admission to hospital one of the other boys in the ward contradicted him on some trivial point, when he immediately seized a poker, hunted the lad around the ward, and would undoubtedly have injured him but for the intervention of the sister. After this incident his fellow-patients were more careful in their dealings with him, but on several subsequent occasions he displayed signs of anger quite out of proportion to the cause of his wrath. On the other hand, his risible faculties were quite as easily excited. Some humorous remark would send him into a perfect convulsion of laughter, which was apparently quite uncontrollable in character. On such occasions he would sometimes lie on the bed, or sit back in a chair, and, while his whole body shook, he would shriek with delight for, perhaps, five or six minutes, so as to be plainly heard in the adjoining wards. The remonstrances of the other patients were powerless to stop what was literally a paroxysm of laughter, and when the sister in charge reproached him he could only cover his head with the bed-clothes and continue the laughter under the clothes. The other boys in the ward were not slow to notice this peculiarity, and took great delight in saying or doing things which gave rise to these outbursts of mirth. When the sister appeared they would sit with grave faces, while the hapless patient vainly endeavoured to check his hilarity.

Considering the duration of this case and the large number of convulsive seizures that have occurred the condition of the patient is not unsatisfactory. Of course the mental outlook is not altogether reassuring. I think, however, that the generalised nature of the convulsions makes them more amenable to treatment by bromides than would be the case if the convulsions were localised, and treatment on these lines is being carried on at present.