Short Notes and Clinical Cases.

A CASE OF EPILEPSY ILLUSTRATING THE LOSS OF CORTICAL CONTROL OVER LOWER FUNCTIONS.

By R. G. GORDON, BATH.

SINCE Hughlings Jackson pointed out that a negative lesion could not be held responsible for positive symptoms, the phenomena of epileptiform convulsions have gradually come to be regarded as the activities of lower levels in the nervous hierarchy released from control of the higher levels. It is seldom, however, that we can actually observe behaviour on the part of the patient which directly supports the truth of this hypothesis. As a general rule the preliminary phases of an epileptic fit are so unexpected and are passed through so rapidly that we are quite unable to detect any gradual abrogation of higher control before the familiar phenomena of the actual fit occur. For this reason it seems worth while to record the observations described below, as although they only represent what happened on one occasion and it has unfortunately been impossible to repeat the record then obtained they do seem to afford that direct proof of Jackson's hypothesis which is so difficult to obtain.

R. P. was a boy of 12 years who was brought to the O.P. Department with the complaint of epileptic fits. His mother gave a history of natural labour with this child, who was the only one of the family. No relevant family history was obtained as to epilepsy or other nervous or mental trouble. The patient had a convulsion lasting one hour when eleven months old and this was said to be due to teething. Otherwise his development was normal until he reached the age of six and a half, when he was said to have had a severe convulsion or series of convulsions lasting from four to five hours and affecting both sides of his body. It was noticed that the last movements to pass off were on the left side of his face. At the age of seven he fell off a shed on to his head and was reported to have been unconscious for a minute or two, but he had no convulsion and no doctor was called in. At the age of nine he was seen by his own doctor for attacks of what was described as petit mal. It was noted at this time that the patient was a very nervous child, suffering from night terrors. In March 1923, when aged ten, he had a series of epileptiform convulsions which were characterised by deviation of eyes to the right; it was noted that the fits started on the right side of the body and lasted for an hour and a half. Since this time he has frequently had

attacks of petit mal in which he "goes white round the mouth, is unconscious and speaks incoherently." In October 1924 he had a series of grand mal attacks followed by left-sided headaches. In June 1925 while at school he had the fit which is the subject of the present communication. On examination shortly after this he was found to be suffering from enlarged tonsils and adenoids, but he was otherwise physically fit. No reflex changes were discovered; he was mentally bright but was obviously a nervous child and apparently suffered continuously from night terrors. The parents were over-anxious and were always worrying about the boy's health.

On the occasion referred to above, in June 1925, he was at school and engaged in writing to dictation. Words were read out as recorded in the left-hand column. His replies were correct as far as the word "quarrying." After this his replies are recorded in the right-hand column. At the point "-ation" he fell over unconscious and had a severe epileptiform convulsion.

Pillaged orient

Oriental corrupted

Destined destination

Elaborate projecting

Minaret delicately

12 days, 2 hrs., 50, 18 mins.

Bazaar adopted horizon

System cylinder cylindrical

Occasion occasionally

quarry quarrying

Precisely revolution

Success successive

Anarchy anarchist

Opium associate

Association episode.

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another anerihind

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assovere assovers-

ation.

The above is an exact copy of his exercise book.

As has been said this seems to illustrate very prettily the true nature of an epileptiform fit as a release from higher cortical control. The jargon agraphia is a clear manifestation of the loss of cortical control culminating in a complete liberation of the lower motor functions which manifest themselves as a convulsion.