

extends upwards on the back of the hand to about one inch above knuckles, and on the front it corresponds to lowest fold running across the palm. The entire hand below this is absolutely anæsthetic, including the last joint of the thumb. There is no hæmorrhage from the prick of a pin. The sensibility on the upper part of the hand and the remainder of the limb is quite normal, and the sense of location good. Triceps reflex is not obtainable. Wrist reflex present but not exaggerated. She is wholly unable to state the position of the fingers of left hand, eyes being closed. She says they are flexed when extended, and vice versa. With the eyes closed she can imitate a movement given to her left arm only approximately with her right, and in placing her left fore-finger on the end of her nose or in bringing the two forefingers together she exhibits a certain amount of inco-ordination. Left leg and foot normal as to muscular sense as well as to the sense of touch, pain and location. She says left ankle is a little weak, and that it turns over occasionally when she walks. Muscular force good, but perhaps a little less than in right leg. Knee-jerks normal. Other limbs and face unaffected in any way. Eye discs normal. No noticeable contraction of field of vision. Central vision good, and she recognizes colors well. Internal organs healthy. No headache of late, formerly she had some in frontal region. Tongue protruded straight, pulse 84 and regular. Paralysis is flaccid, and no rigidity in any part of the limb. Mother says that the paralysis has been much the same as at present for last four months. Dr. Beines, who kindly sent me the case, tells me that he passed a current of 150 milliamperes momentarily through the hand, without evoking the least sign of sensation. Nov. 7th, Dynamometer. Left hand 10 lbs., right 44. Muscular movements performed with greater force than last day. The sensibility of the hand is much improved. She can now feel pin prick on the palmar surface of hand and fingers but not on the back. The joints of these fingers can be twisted without causing any pain, but wrist, elbow and shoulder joints are more or less sensitive. Sense of weight is defective in left hand, normal in right. The muscular sense is somewhat improved. Hearing, taste and smell good. Pharyngeal reflex

present. No trophic disturbances in skin of hand. No hysterogenous zones. I applied static electricity.

Nov. 8th, Dynam. Left hand, eyes closed, 5 lbs.; with the eyes open, 11 lbs. Right hand 36 lbs. Voltaic electricity shows no reaction of degeneration in the muscles, and the induced current acts normally. She says she can now feel the electric current in the hand.

In regard to diagnosis, since the disease is evidently an affection of the nervous system, its seat must therefore be in the peripheral nerves, in the spinal cord or in the brain. If in peripheral nerves we must look to a lesion of brachial plexus to explain it. The absence of atrophy, the normal electrical reactions, the absence of trophic trouble and the peculiar distribution of the anæsthesia, which is entirely different to that due to a lesion of the brachial plexus, render this suggestion untenable. If it were a lesion of the cord we must suppose it strictly limited to the anterior cornu, since no other parts of the body are distinctly implicated. An inflammation of the grey matter here, however, would certainly have led in this time to a marked atrophy of the muscles and reaction of degeneration, both of which are absent. A disturbance of sensibility and the loss of muscular sense, together with the absence of a febrile onset, quite excludes the possibility of the anterior horn in the cervical region being the seat of the trouble.

We now have the internal capsule and cortex of the brain left, an affection of the medulla, pons or cerebral peduncle not requiring notice from the peculiar distribution of the symptoms. If we suppose a sudden organic lesion either in the internal capsule or the grey substance, we would naturally expect some apoplectic symptoms which are entirely wanting in the case before us. An organic lesion of the internal capsule producing a pure brachial monoplegia is a fact almost unknown. It would be necessary besides to suppose the lesion to be limited strictly to the anterior part of the posterior limb, and in this case there would be no disturbance of sensibility.

There now remains the grey substance or the subjacent part of the cerebrum ovale to be considered. A lesion here sufficiently severe and strictly limited to the middle