

third of the ascending frontal and ascending parietal convolutions would undoubtedly have, as a consequence, a brachial monoplegia, but such a monoplegia in a pure form, without any implication of the face, tongue or leg at any time is almost as rare as a lesion producing the same effect in the internal capsule. Besides, such a lesion must be followed by secondary degeneration, which would be marked clinically by a certain degree of contraction in the affected arm, and also by an exaggeration of the tendon reflexes, both of which are absent in this case. Further, if we suppose the lesion limited to the middle third of the Rolandic area alone, how are we to account for the *marked* sensory disturbances here met with?

A consideration of these facts, together with the history that for the past four months the patient's condition has remained *in statu quo*, and also in view of the fact that her condition has suddenly improved (within the past three days) both in regard to the diminished extent of the sensibility and the increased force of the grasp, shows, I think, that the case is one of a functional nature, cerebral in its origin.

We at once come to the question, should we not use the term hysterical rather than the more extended one of functional monoplegia? In regard to this question the researches of the late Prof. Charcot in hypnotism are extremely interesting. In hysterical subjects he produced by hypnotism a complete paralysis limited to the arm, with loss of cutaneous and deep sensibility. He went even further and produced paralysis and sensory loss in the limb, segment by segment, the remaining portion of the arm being unaffected. In other words, he produced by suggestion a condition precisely like that met with in certain cases of brachial monoplegia, which he has reported, from which he assumed that *all* these cases were hysterical paralysis. But does it follow from this that the same results might not be obtained from persons subjected to hypnotism which were not hysterical? I believe so, and the absence of other hysterical symptoms in this case, such as a peculiar mental condition, hysterogenous zones, attacks of any kind, and the limited extent of the deranged sensibility, together with the absence of any marked affection of the special senses or derange-

ment of the pharyngeal reflex, lead me to think the case one of a functional rather than of hysterical paralysis.

In regard to the location of the trouble, Charcot in some similar cases which he has published placed it in the middle third of the Rolandic area, with some encroachment on the adjoining parietal lobule. Bastian, who, as you know, does not consider the Rolandic area as being purely motor in its functions, but rather a kinæsthetic centre (that is, a centre for sense of movement impressions), would, I think, explain the paresis and loss of muscular sense by a lesion of the Rolandic area, but the disturbance of the other forms of sensibility he would explain by a co-existing lesion of some of the sensory fibres in the posterior part of the internal capsule.

Of the pathogenesis, vaso-motor derangement or lowered nutrition seem to me the two most probable causes. Although, according to Foster, vaso-motor nerves have not been demonstrated in the arteries of the brain, this negative evidence, he says, is not to be too much relied on. That a vaso-motor spasm in the brain should exist continuously for months seems strange, but is it any more so than that the same spasm should exist for an equal length of time in the region of the body affected by anæsthesia, as can be demonstrated by the absence of hæmorrhage following slight wounds of these parts? Moreover, the sudden disappearance of long continued symptoms, which sometimes occur as the result of a strong emotion or a convulsive attack, would certainly seem to indicate that no serious nutritive lesion had taken place.

This case presents some interesting points (1) as to the cause, a pain in the shoulder leading to its paralysis and soon that of entire limb. That an injury to the shoulder will produce these symptoms is well known, or, further, a mere slap on the shoulder of a person who was hypnotized will also produce it. With these facts in view, would we be justified in supposing that a sudden pain in the shoulder coming on without obvious cause might so react on the brain of a predisposed person as to produce a similar paralysis? This case would seem to indicate it.

(2) The affection of the muscular sense