time, and has lately been stationary. The disease described by Charcot, on the other hand, spread gradually from the upper to the lower extremities and ended with bulbar paralysis; its progress was steady and it is of relatively short duration, in the rule not exceeding two years. After reviewing the anatomical facts of bulbar paralysis, Dr. Lichtheim asked the question whether the affection of the lateral columns was primary, or whether it is to be considered as due to a descending secondary degeneration, proceeding from the original point of lesion in the medulla. The atrophy of the hand is not a fact against the theory of a secondary degeneration, since this might affect also the motor ganglion cells of the anterior horns. On the other hand, the fact that the lower extremities were much more seriously affected than the upper, is of weight as against the probability of any secondary degeneration.

ATHETOSIS AND POST-HEMIPLEGIC DISORDERS OF MOVEMENT.—At the session of the Royal Medical and Chirurgical Society, May 9th, (rep. in *Brit. Med. Journal*, May 18.) Dr. W. R. Gowers read a paper on athetosis and the motor disorders following hemiplegia. He presented two cases of the first named affection and discussed its relations with other unilateral motor symptoms. One of his cases presented slow involuntary movements leading to various distortions of the hand, and a similar although less striking, condition in the foot. The movement had supervened on a slight attack of hemiplegia; under electrical treatment the spontaneous movements, after existing two years ceased, only inco-ordination of voluntary movement remaining. In the other case, the movements were slight, and only characteristic when the hand was extended. They had been preceded for some time by unilateral numbness. It was pointed out that neither the clinical history, nor the supposed pathology of athetosis, afforded grounds for separating it from other forms of disordered movement commonly seen after hemiplegia, but any one of which might occur as a primary affection. The essential element in athetosis was a slow, remitting, mobile spasm, and it differed from the common post-hemiplegic contracture chiefly in the absence of fixed spasm. The varieties of quick intermitting spasm, regular and irregular, were then described, and its effect in producing inco-ordination, both choreiform and violent. In a case of extreme inco-ordination of the arm after hemiplegia, the necropsy showed a cicatricial induration extending through the middle of the optic thalamus. There was no secondary degeneration of the spinal cord. In "late rigidity" it was pointed out, two elements might be discovered; one varying, ceasing during sleep, increased by an attempt at movement; the other unvarying. The latter only was to be referred to changes in the cord and muscle; the former possessed many features in common with mobile spasm, and was probably to be referred to brain changes. Several illustrative cases were shown, and a table was exhibited, grouping the various disorders of movement under the three heads of "intermitting," "remitting," and "fixed spasm."