each instance the paralysis came on and in two death occurred. The serum used was chiefly from older cases.

In reply to Dr. Dercum's question Dr. Weisenburg was inclined to agree in the main with Wickman's classification. He did not, however, believe in the neuritic and ataxic types. He was under the impression that the pains were not neuritic but meningeal. Besides, of the ataxic types, by which undoubtedly Wickman meant the cerebellar form, he saw only one in which this distinction could be used. While there were many cerebellar cases, such symptoms were always in conjunction with pontine and spinal cord involvement. He was of the opinion that the disease was not transmitted by personal contact and if so not to a great degree, basing his opinion largely upon the fact that the multiple cases occurred within a day or two of each other, this arguing for an infection of the same source. The same thing is true of the abortive types.

Dr. Dercum said that in his experience this epidemic had varied considerably from previous epidemics. While he had at present a group of cases of poliomyelitis in his clinic, there were very few who answered the old classical description, *i. e.*, cases with one or both legs involved. There were quite a number of cases in which the arms had suffered and at times cases in which the face had been involved. Further, this epidemic was not characterized by the same degree of pain as was noticeable in the poliomyelitis of seven or eight years ago. According to his recollection the pain in the previous epidemic was in many cases very severe. Dr. Dercum asked Dr. Weisenburg whether in the present epidemic he had met with any cases of superior polioencephalitis in the adult.

Dr. H. Maxwell Langdon said he had not seen a case of superior encephalitis. He had a chance to examine the eyes of three adults, and in none was there encephalitis.

Dr. Dercum remarked that he had employed the term of encephalitis as applied to lesions of the nuclei of the various ocular nerves.

UNUSUAL LOCALIZATION OF AN EPILEPTOGENOUS ZONE IN A CASE OF ORGANIC EPILEPSY

By Alfred Gordon, M.D.

After reviewing the ideas of Marshall Hall, Brown Séquard, Fritch and Hitzig, Meynert, Chaslin and Bleuler, Gordon discusses the three-level view of Hughlin Jackson concerning organic epilepsy. He then reminds of Gowers' case in which an epileptic suddenly had an attack of hemiplegia with permanent cessation of convulsions, of Prus' work concerning the painting of the motor cortex with cocaine with cessation of convulsions. He speaks of Ferrier's experimental work, also of that of Corville and Duret. Analysis of cases of organic epilepsy leads him to the conclusion that a great multiplicity of lesions in the cerebrum may be considered as epileptogenous zones and that stimulating surfaces may be localized in any portion of the central nervous system and the reception of the stimuli and the discharge of motor power are the province of the motor cells of the cortex. Not one of the lesional foci described can claim pathognomoncity. Gordon reports an unusual case with autopsy showing that the lesion was in the anterior cornua of the lateral ventricle. The ependyma was covered with nodules thickly crowded, more on one side than on the other. During life patient presented unilateral convulsions confined to one arm with unconsciousness, also continuous twitchings during conscious state in the same arm. As to the character of the nodules, they were probably miliary gummata, which view is

substantiated by the fact that many vessels in the vicinity have mononuclear cells in their walls.

Dr. Charles K. Mills said he thought Dr. Gordon's position was well taken, that irritation of zones situated in different parts of the brain may through transmitted stimulus to the motor cortex lead to these attacks.

A CASE OF UNUSUAL TORSION SPASM WITH FACIAL MOVEMENTS

By T. H. Weisenburg, M.D.

The patient presented an unusual type. First of all there is no history of Jewish blood in the family, whereas most of the cases reported with one or two exceptions have been in persons of this religion. Secondly, there has been for many years distinct involvement of the muscles of the face in the distribution of the motor cranial nerves. In a recent paper by J. R. Hunt in the *Journal of American Medical Association*, this subject was reviewed and Hunt made the statement that he doubted that such cases exist. Lastly, this case is unusual in the sense that there is very little spasm in the muscles of the legs and hip, most of the movements being confined to the head, neck and chest.

The symptoms began at the age of six, the physical and mental development up to that time being perfectly normal. At this time a twitching began in the right arm, this extending to the muscles of the right and left shoulder, and then there developed a tendency of the whole trunk to twist from the right to the left. In a short time the neck began to twist to the left and now at the age of twenty-six he has all the well-marked symptoms of a torsion spasm, this consisting of a torsion of the whole trunk from the right to the left. The head is mainly twisted from the right to the left, there being constant jerking spasms of all of the muscles of the upper chest, shoulders and neck and the muscles of the jaw. The twitching in the muscles of the jaw are so severe that the patient is unable to talk loudly, he being forced to whisper, and there is also constant grinding in the teeth which are very much worn. He also has difficulty in chewing and swallowing. There are very few if any torsion movements in the hips and legs.

Physical examination shows no atrophy but an over-development of the muscles on account of the constant spasm. Tendon reflexes are increased. Mental development is normal. Wassermann and Abderhalden tests are negative.

Dr. Cadwalader stated that Dr. Weisenburg's patient had impressed him as resembling in certain respects other cases that had been presented before the Society under the title of progressive lenticular degeneration. Dr. Cadwalader stated that he was inclined to believe that dystonia musculorum as described by Oppenheim was a true organic condition and that it might be attributed to a disturbance in the functions of the lenticular nucleus. There is a distinct group of cases that resemble one another, characterized by muscular spasm, hypertonicity, tremor and contracture that differ somewhat in degree of intensity and in distribution. Nevertheless in all probability they represent merely clinical types that are referable to disturbance of the lenticular nucleus.

Dr. Cadwalader stated that in his opinion Dr. Weisenburg's case of torsion spasm belonged to this group of cases.

Dr. A. A. Eshner said that the case resembled some of those that had been at Blockley, presenting athetoid movements of the hands and face, disorder of speech, and in some instances contractures. At one time these cases were looked upon as due to deficient development of the lateral tracts.