

tongue, complete loss of the three forms of sensation on the entire left side, cerebellar asynergy, holding the head on the right shoulder, and titubation with a tendency to walk to the right.

At present he has some difficulty in swallowing on the right side, some shortness of breath, some facial deviation to the left, narrowness of the right palpebral fissure, syringomyelic sensory dissociation on the left side including the face, tremor and atrophy of tongue with R.D., and stiffness of the jaws.

Dr. Gordon said, as to the possibility of polioencephalitis, he considered that at the beginning, but he was absolutely unable to explain the condition in that way. The cerebellar attitude of the head, and the cerebellar gait were most typical of a cerebellar or peduncular involvement. How polioencephalitis could affect at the same time fibers of the peduncle he could not explain, so he had diagnosed hemorrhage. The latter could explain all the symptoms. The cerebellar symptoms cleared up.

As far as he knows only a few fibres of Gowers' tract enter the white reticulated substance. The majority of the fibers of Gowers' tract go around the lateral lemniscus to the superior cerebellar peduncle. Assuming that the fibers of the white reticulated substance are involved on one side, the minority of Gowers' tract would also be affected. That the destruction of a few fibres of Gowers' tract would give such a complete picture of sensory disassociation is a question which has remained unsolved in Dr. Gordon's mind. When he examined the patient three days after the apoplectic insult he found while pain and temperature were entirely abolished on the left side, touch was also somewhat affected, but later touch returned. As far as the sensory disturbance of the face is concerned, of course Dr. Dercum's suggestion would perhaps explain the question of polioencephalitis. But on the other hand it does go hand in hand with the entire picture.

### THREE CASES OF LESION OF THE EPICONUS.

By William G. Spiller, M.D.

Minor, of Moscow, has pointed out that a lesion of the gray matter of the fifth lumbar and first and second sacral segments of the spinal cord gives a definite clinical picture, characterized by the presence of certain symptoms and the absence of others seen in lesions of the conus. He has given the name of epiconus to the portion of the cord mentioned. The symptoms are atrophy and paralysis of motion and sensation in the innervation of the sacral plexus, especially in that of the peroneal nerves. The gait is of the steppage type because of foot-drop. The flexors on the back of the thighs and gluteal muscles may be weak because of the implication of the fifth lumbar segment. The Achilles tendon reflexes and plantar reflexes are lost. The sphincters of bladder and rectum and the sexual functions are not affected because the conus in which the centers for these functions and muscles are situated and the white columns above the conus are not implicated. The patellar reflexes are preserved, as the lesion does not extend into the fourth lumbar segment.

Dr. Spiller has had three cases of lesion of the epiconus. The first and third were traumatic in origin. The first has already been reported by Dr. Weisenburg.

The second case was seen with Dr. Alfred Stengel. The symptoms developed after pneumonia, and the diagnosis was poliomyelitis of the

epiconus. The patient, a man, had bilateral foot-drop, slight on right side, intense on the left side, but in other parts of the limbs the voluntary power was good. The muscles of the legs below the knees were wasted. The patellar tendon reflexes were exaggerated. Ankle clonus was obtained on each side but was soon exhausted. The ankle clonus with the pronounced foot-drop of the left side was very striking. Micturition and defecation were not disturbed. Sensations of touch and pain were normal in all parts of the lower limbs. Babinski reflex was obtained feebly on the right side.

The third case was a man who on November 6, 1905, fell and struck his back on the lumbar and sacral regions. At the present time the sensations of pain, heat and cold are diminished, but not lost, over the outside of each leg and dorsum and sole of each foot, especially on the right side, but are normal on the inside of each leg and on the back and front of each thigh. Tactile sensation is normal everywhere. The patellar reflex is present on each side but is much diminished. The Achilles tendon reflex is nearly normal on the right side but is weak on the left side. Complete foot-drop is present on each side. Babinski sign is not present on either side. The flexor muscles on the back of the thighs are a little weak. He has no disturbance of bowels or bladder.

Lesions of the epiconus have attracted little attention.

## THE PHILADELPHIA NEUROLOGICAL SOCIETY.

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The President, DR. ALFRED GORDON, in the Chair.

### SYMPOSIUM ON ACUTE ANTERIOR POLIOMYELITIS.

#### THE POLIOMYELITIS EPIDEMIC IN THE STATE.

By Spencer M. Free, M.D., Dubois, Pa.

Dr. Free presented three cases illustrating the various types of the disease which has been epidemic in the interior of the State of Pennsylvania. Dr. Free gave the histories of about one hundred cases of poliomyelitis which have occurred in his own observation and that of others in the immediate vicinity. He told of the onset, duration and course of the epidemic and the cases he had observed. Apparently the disease was not limited to any one part of any infected town. It appeared suddenly and was quite severe, but the prognosis in most cases was good in as much as there were only a few deaths. The disease seemed to involve both lower limbs and presented meningeal symptoms and considerable pain. Among other interesting facts, Dr. Free related how some lower animals such as pigs and chickens were also affected with the disease.

#### A CASE OF ACUTE ANTERIOR POLIOMYELITIS WITH INVOLVEMENT OF THE MUSCLES OF THE CHEST.

By C. S. Potts, M.D.

S. P. Aged 10 years. When three years old had a fall. Two days after had a convulsion followed by high fever. On the next day it was noticed that the arms and legs were paralyzed. Some improvement grad-