woman, a Polish emigrant, unable to speak English, who had died recently in the Philadelphia Hospital. The true nature of the lesion had been overlooked and the case had been regarded as one of ordinary hemiplegia. This was doubtless due to the difficulty of obtaining a history and of interpreting symptoms, and to the close resemblance which the case bore to ordinary cerebral softening in the aged.

The tumor was located exactly in the fissure of Rolando at about its middle third. The arm centers must have been first involved. The ascending frontal convolution was compressed in front, and the ascending parietal convolution was compressed behind the growth. The tumor measured about five centimeters in diameter and was flattened by contact with the skull. It was entirely meningeal, compressing the brain substance and could easily have been removed by surgical operation. From its location it may have caused interesting sensory as well as motor symptoms, but unfortunately these had been overlooked. The hemiplegia was of the spastic type, with greatly exaggerted reflexes.

Dr. Lloyd called attention to the ease with which brain tumors may be overlooked or confused with other lesions, especially cerebral hemorrhage and softening. The present case had been under the care of at least three visiting chiefs at Blockley, but its real nature had not been suspected.

A CASE OF PARTIAL CROSSED HEMIASYNERGIA

By Tom A. Williams, M.D., of Washington, D. C.

The possibility of its aiding in the future solution of some hitherto unsolved problem regarding the course of impulses coming to and leading from the cerebellum had induced Dr. Williams to present this remarkable case of cerebellar hemi-asynergia in which the opposite side of the face is also implicated.

It is unfortunately, however, impossible as yet to infer legitimately regarding the actual lesion; for the patient is in all probability syphilitic and both cerebellar lobes may be implicated.

Dr. Williams was obliged to Dr. Elliot of the Emergency Hospital, Washington, for the privilege of reporting the case.

It is that of a man aged 31 years who six months ago began to feel weak and dizzy and had severe pains in the loins and occiput which kept him awake at night. For three weeks he worked and then went to bed for two months by medical orders. About two months ago he noticed that the left hand was clumsy and that silly thoughts occupied his mind while he was perambulating the streets without occupation. These were chiefly about money. He also had noticed some difficulty about swallowing.

Physical Examination.—On the facial movements being tested they are seen to be accompanied on the right side by a very decided irregular, coarse tremor of the cheek, jaw, lips and tongue, the left side remaining in equilibrium except in so far as it is shaken by the communicated movements of the right side. The eyes are also unsteady when turned to the right. On protrusion of the tongue, its right side is agitated by a similar tremor which almost ceases in about ten seconds, after which interval there is also more control over the facial trembling.

In the left arm there is slight asthenia, considerable impairment of

the attitude sense, decided clumsiness and marked impairment of the diadocokinesis. There is also an intention tremor, finer than that of the face, and not maintained more than ten seconds. The general sensibility is very acute and there is no true muscular weakness.

Rotation tests show no anomaly of vestibular, and the pupils react well to light and accommodation.

If the lesion is a single one it would seem that the contra-lateral ponto-olivary fibers which traverse the raphe are implicated after doing so and lead to the facial intention tremor.

ON THE HYPERESTHETIC AREAS (HEAD'S ZONES) IN VISCERAL DISEASE

By M. D. Bloomfield, M.D.

The speaker said he had reviewed the entire literature on the subject, the experience of those who have tried the method, their results, etc. He cited five cases: (1) Gastric cancer, (2) aneurysm of ascending arch of aorta, (3) tumor of ovary, (4) inoperable sarcoma of pelvis, (5) sarcoma of testicle in which the hyperesthetic areas, over zone corresponding to the anatomical division of the abdominal wall, were the chief diagnostic symptoms in these cases. Twenty-five cases of chronic visceral involvement, tumors, ulcers, parenchymatous nephritis, gangrenous appendicitis in which the sign was most conspicuous. He compared the laboratory report of twenty cases studied by him in which that department had not more than in eight cases given the proper light as to the nature of the illness, while the clinical symptoms predominated. However, the laboratory analysis was always most helpful.

One case in particular was a patient, 48 years of age, who was treated for chronic constipation by some of our most distinguished men for over five years, who presented the Head's zone over the epigastrium. After studying the case operation was advised and disclosed a beginning carcinoma of the pylorus. Patient was operated on by Dr. Deaver and has gained forty-five pounds since operation, three months ago.

Dr. Bloomfield spoke of the various theories advanced explaining this phenomenon, reviewing especially Head's article on the epicritic and protopathic sensory pathways.

Dr. Price said it was interesting to him in showing the practical value of Head's zones. He recalled Dr. Dana's paper in which he recorded his studies of a case with complete section of the trifacial nerve, also cases of cerebral hemorrhage which involved part or all of the sensory portion of the capsule. In these cases he found no sensory disturbances as described by Head and concludes that the value of this method is limited to the distribution of the spinal nerves and not to higher pathways or to the cranial nerves.

Dr. McCarthy said that as Dr. Bloomfield had called attention, one must be careful as to the question of suggestion in outlining the areas. The question of reflexes is important. Working out the question of Head's zones in connection with the lungs at Phipps Institute Dr. McCarthy concludes that we shall have to depend more upon the objective sensory test to the patient than anything else. He is inclined to think the work he has done in testing will be of practically no value at all in so far as the test concerns tuberculosis. These patients with tuberculosis are