

mal in size and beat, except that the sounds are slightly increased, and the abdominal viscera are all normal, but the area of liver dullness is slightly decreased in all directions. His muscles are soft and flabby in the back and legs; they are in constant motion or tremor. When he stands erect the muscles of his legs tremble so much that he shakes all over. When he sits down and has one leg crossed over the other, the tremor is more noticeable, the foot being in constant motion. He walks with his head bent forward, and the eyes fixed toward the ground a short distance ahead. His steps are short and hurried, and his arms are slightly flexed and pendulous, with the thumb and forefinger approximated, as in the act of making a pill. The disease has not advanced to the extent that his face and speech is affected. The characteristic "mask-like" expression is absent. There are also no mental changes except that he is brooding somewhat over his affliction.

*Diagnosis.*—The diagnosis in this patient is easy, though the disease is not so far advanced; but from the gradual onset, the tremor of the muscles, the general weakness, and the character of his gait and attitude, we have diagnosed his trouble as one of paralysis agitans. It is called shaking palsy, or Parkinson's disease. This disease, especially in the stage this case is at present, might be mistaken for cerebro-spinal sclerosis, or multiple sclerosis. The chief differential points present in multiple sclerosis are no tremor when the patient is at rest, violent shaking of the head, tendon reflexes greatly increased; patient has no tendency to run forward; voluntary motion beyond control; the patient is peevish and childish, and there are periods of marked improvement.

*Pathology.*—The true pathology of paralysis agitans is not known, and remains to be a subject for speculation. Some think its pathological condition primarily begins as an endarteritis and periarteritis, followed by a proliferation of the neuroglia and patches of perivascular sclerosis. Others believe that it is first a functional disturbance, and later a destruction and degeneration of the dendrites of the anterior horn cells, thus interfering with the motor impulses. Many other suppositions have been made, but none are entirely satisfactory.

*Etiology.*—The disease is more common in men than in women. Alcoholism, exposure to cold and wet, mental work and mental exhaustion are supposed to be the causes of the disease. In this patient we have a history of alcoholism for fifteen years, and also exposure to wet and cold; the three facts combined are sufficient to lead us to believe that the alcoholism and the exposure were the cause of his trouble.

*Treatment.*—Most of the writers on this disease say that the medical treatment is absolutely without avail. Of course this is