Chronic Subdural Hematoma Presenting a Parkinsonian Syndrome

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In many cases the clinical diagnosis of a chronic subdural hematoma is evident and operation may be carried out without further paraclinical investigations. In a limited number of cases, however, a forgotten trauma, old age, lack of signs indicating intracranial hypertension and paucity of neurological symptoms make the diagnosis a difficult one. Unilateral parkinsonism as the only manifestation of chronic subdural hematoma is a rare condition and it seems worth while to report it here.

Report of Case
A 53-year-old farmer was admitted with the main complaint of right-sided parkinsonism. The disease began 4 months prior to admission without any history of trauma or preceding infection. The symptoms were progressive in course.

Examination. Components of a parkinsonian syndrome were present, consisting of a 5 per sec. static tremor and a cogwheel phenomenon foremost in the wrist and elbow. The leg was less involved. The gait was somehow rigid without propulsion of the body. No abnormalities could be found in the speech nor in mimicry.

Course. Stereotaxic operation was planned. With Riechert’s stereotaxic instrument fixed to the head, 40 cc. of air were injected by lumbar tapping and roentgenograms of the skull were taken in anteroposterior and lateral views. We were surprised to find the ventricular system together with the septum pellucidum shifted to the right by a space-occupying mass of the left hemisphere. The operation was discontinued. Subsequent carotid angiograms on the left side revealed the mass to be localized in the frontal region. The preoperative diagnosis was neoplasm, probably a meningioma. The very thick outer membrane and lateral views. We were surprised to find the ventricular system together with the septum pellucidum shifted to the right by a space-occupying mass of the left hemisphere. The operation was discontinued. Subsequent carotid angiograms on the left side revealed the mass to be localized in the frontal region. The preoperative diagnosis was neoplasm, probably a meningioma.

Operation. An osteoplastic flap was turned and the dura mater was incised. The very thick outer membrane of a subdural hematoma became visible. It was excised partially and the underlying hematoma was evacuated by suction.

Postoperative Course. The rigidity and tremor were found to be abolished completely. On the 3rd day after operation, however, tremor and rigidity reappeared and the patient became dysphasic. Angiograms were re- 

Comment
Supratentorial, hemispheric growths are apt to produce sometimes a parkinsonian syndrome or involuntary movements similar to it. Frontal and temporal lobes seem to be the sites of election. Benign extracerebral tumors are encountered more often than malignancies. Our own material of 9 such cases included lesions such as gliomas, meningiomas, epidermoid and hydatid cysts. The question always arises about the dependency of extrapyramidal symptoms upon neoplastic lesions. Removal of a tumor, followed by abolition of symptoms, leaves no doubt about the existence of such relations. In many instances, however, the basal ganglia are so extensively involved that full restoration of normal movements can not be expected. Simultaneous presence of tumor and pathological findings involving the basal ganglia, particularly the substantia nigra, indicate two separate conditions. In the majority of cases, however, the tremor differs in no way from that encountered in parkinsonism.

Summary
A case of chronic subdural hematoma or pachymeningitis hemorrhagica interna is described, presenting a unilateral parkinsonism as the only symptom. A frontal space-occupying lesion was detected on pneumoencephalograms performed during a stereotaxic procedure. Carotid angiography verified the diagnosis. Subsequent operation revealed a chronic subdural hematoma. Its evacuation was followed by complete abolition of involuntary movements.

References