Humbert, G., and Naville, F. FAMILIAL AND HEREDITARY CENTRAL NEUROFIBROMATOSIS. [*Annales de médecine*, 1918, No. 2.]

Peripheral neurofibromatosis or Recklinghaus disease is now a well-known hereditary and familial disease picture. Cases of extended central neurofibromatosis are much rarer. In these the tumor is located in the central nervous system, inside the skull or spinal cord. The authors describe the case of a patient suffering from peripheral neurofibromatosis with other nervous phenomena such as headache, dizziness, vomiting, disturbances of sight and hearing of many years standing and hemiatrophy of the tongue, pointing to an old and by this time considerably extended central neurofibromatosis. The patient's father, who died at the age of thirty-one, had had double central deafness and a cerebral or cerebellar tumor. No autopsy was made but the various nervous symptoms point to a central neurofibromatosis. A younger brother who had a lumbar fibroma had protracted nervous disturbances at the age of seventeen and died at eighteen during an attack of violent headache accompanied by somnolence and stupor.

2 AND 3. SPINAL CORD: MEDULLA.

Moore, J. E. THE CEREBROSPINAL FLUID IN MULTIPLE SCLEROSIS. [*Archives of Internal Medicine*, XXV, 58 (January, 1920).]

Reports of the laboratory examination of the cerebrospinal fluid in multiple sclerosis, with particular reference to the colloidal gold curve of Lange, are few and contradictory. Thus in 40 cases gathered from the literature, fourteen gave paretic gold curves, twenty-five were negative and one was atypical, while usually no reference was made to the globulin test and the cell count. Because of this lack of uniformity, the Johns Hopkins Hospital material was reviewed.

The cerebrospinal fluid findings in twenty-eight cases of multiple sclerosis are reported. In twenty the diagnosis was clinically certain; in the other eight cases, clinically doubtful. In the first group, the findings were (a) negative blood and spinal fluid Wassermann (all cases); (b) pleocytosis (eight cases); (c) positive globulin (eighteen cases); (d) paretic gold curve (eighteen cases). In the second group the findings are the same, except for the gold curve, which was syphilitic in three cases and negative in five cases. Together with the clinical evidence, it is believed that the spinal fluid picture is fairly constant, and that, other things being equal, such a picture is a strong argument in favor of a diagnosis of multiple sclerosis. In its absence the diagnosis becomes at least doubtful. [Author's abstract.]

Tibor, Alfred. PARALYSIS OF CERVICAL SYMPATHETICUS IN MULTIPLE SCLEROSIS. [*Neurol. Centralbl.*, August 1, 1918, No. 15, Vol. 37.]

Although clinical study has almost exhausted the symptomatology of multiple sclerosis and it is possible to construct the entire typical picture

of Charcot's disease, the author had opportunity to observe in several cases of disseminated sclerosis a very remarkable symptom complex. In these cases (three) the diagnosis of multiple sclerosis could be made with certainty, because of the symptoms, the duration of disease, the constant variation of the phenomena, and the multilocular form of the same. The other symptoms not in conformity with the disease picture of multiple sclerosis, namely, the miosis, the ptosis, the enophthalmus, components of Horner's symptom complex, besides certain vasomotor phenomena observed in one of the cases, indicate an unusual complication of the disease, namely a lesion, and in truth a paralysis of the cervical sympatheticus. The occurrence of miotic pupils has been mentioned by Uhthoff and O. Marburg and by the latter has been brought into connection with the concurrent changes of the opticus. Oppenheim holds that the enophthalmus is not a constant symptom in the Horner complex and, with Necati, explains the origin of the same as due to the gradual disappearance of the orbital fat. The inconstancy of the vasomotor disturbances in paralysis of the cervical sympatheticus is attributable to the different localizations of the centers concerned, throughout the course of the sympatheticus paths, and Necati thinks these vasomotor phenomena occur only during the first stages of sympatheticus paralysis. In the author's case the motor and oculo-pupillary symptoms did not appear singly but are connected with a symptom complex, and for this reason an anatomical change could with probability be assumed as foundation for the same, at the level of the ciliospinal center, so that in the clinical picture of multiple sclerosis there seems to be included an involvement of the innervation sphere of the cervical sympatheticus. The author states that in the neurological literature accessible to him he finds no mention of a lesion of the cervical sympatheticus in multiple sclerosis and the complication seems, therefore, to be rare.

Simons, A. TRANSMISSIBILITY OF MULTIPLE SCLEROSIS. [*Neurologisches Centralblatt*, February 15, 1918, No. 4, Vol. 37.]

The author describes his experiments in transmitting multiple sclerosis to animals by inoculation, following the experiments of W. E. Bullock, who succeeded in producing symptoms of this disease in rabbits. In Bullock's experiments the length of the period of incubation (fourteen to twenty-two days) suggested a living organism as the cause of the disease. Kuhn and Steiner also had success in the same direction. By inoculation with the blood and spinal fluid of a fresh case of multiple sclerosis they produced in guinea pigs and rabbits a paralysis leading to death, which was further transmissible. Using the blood streak preparation of Loeffler they discovered a spirochete resembling that which gives rise to Weil's disease. Though the spirochete was not found in man, its discovery in numerous experiments in animals renders its presence in man highly probable. Such a discovery would throw