believed by him to be newly-formed nerve fibers. From this finding he concludes that the nerve fibers of the spinal cord are capable of regeneration with complete restoration of function, provided the vascular system is intact. The recovery of function after spinal compression, he believes, depends upon the restoration of the normal lymph circulation, upon the formation of medullary sheaths about persisting axis cylinders, and upon the regeneration of nerve fibers.


After a brief summary of the important literature upon the subject, particularly that of Russian authors, two cases are reported in which it was possible to make extensive histological investigations, and in one of them also bacteriological studies. The first patient, a man, was brought to the hospital in a state of intense excitement, with destructive tendencies, and fever. There were hallucinations of sight, hyperesthesia, refusal of food, and occasionally vomiting. The patient did not sleep, became weak, and died on the sixth day of his residence in the hospital. At the autopsy, aside from hyperemia of the central nervous system and of the viscera, there was a slight tumor found upon the anterior veriform process of the cerebellum. Microscopically, there was found distention of the blood vessels, peri-vascular and cellular accumulation, various alterations in the nerve cells and the nerve fibers, proliferation of the neuroglia, distended spaces around the ganglion cells in which cellular elements were found; the nerve cells showed alteration of the nuclei, and disappearance or dislocation of the nucleoli. In addition many of the cells contained a considerable quantity of yellowish pigment that resisted all reagents and stained only with osmic acid. Similar collections of pigment were found in the blood vessels. This pigmentary infiltration of the ganglion cells cannot be looked upon as abnormal, excepting in the areas in which there was some softening, where the cells contained considerably more pigment than in the other situations. No cultures were made from the tissue, but microscopically micrococci occasionally arranged in chains were discovered. The second patient, a soldier, was brought to the hospital in a state of extreme depression. He soon became excited, destructive, had fever, developed swelling in both parotid glands, had extreme exhaustion, and died. The whole period of the acute process lasted fifteen days. At the autopsy there was hyperemia of the brain, enlarged spleen, cloudy swelling and perhaps necrosis of the liver, and also some punctiform hemorrhages in the mucous membranes. Cultures from the cerebrospinal fluid, the heart, blood and the spleen showed the presence of staphylococcus pyogenes aureus. Microscopically the features were similar to those in the other case. Pathologically, these two cases are identical; clinically, one represents an idiopathic acute delirium, the other an acute exacerbation of a pre-existing psychosis. Both are probably due to infection with pyogenic cocci. It appears from the study of these cases as well as from a consideration of the literature that we are not justified in considering acute delirium as an independent disease. It rather represents an acute infection, particularly localized in the central nervous system. It is difficult to explain, however, the route by which the micro-organisms reach the brain, but probably there is an infection of mild form that becomes first generalized and then localized in a brain already weakened by some other cause. However, it is also possible that the idiopathic form of acute delirium may be
produced by some unknown micro-organism that has a peculiar affinity to the central nervous system. This micro-organism then might not affect the other viscera of the body, but could produce extensive changes in the brain.

Sailer.


In the case described by Friedmann the symptoms began with thrombosis of the right retinal artery. A year later the gait became gradually weak and spastic, and after two and a half years only short distances could be traversed. The vesical functions and the cranial nerves were not affected. The patellar reflex was much exaggerated, foot clonus was present, and the paresis was greater in the left lower limb. The tactile sensation was more distinctly, though only moderately, impaired in the left lower limb. No marked subjective disturbances existed. The muscular power in the left upper limb was a little diminished. An apoplectic attack with left-sided paralysis occurred, and death followed five months later. An old focus was found in the right lenticular nucleus, and the basal arteries showed obliterating endarteritis. Degeneration was confined to the crossed pyramidal tracts, except in the lower thoracic region, where the direct cerebellar tract was affected, and in the cervical and upper thoracic region, where the anterior horn cells were moderately diseased on the side opposite to the cerebral focus. The degeneration of the pyramidal tracts extended from the lumbar region to the middle of the pons. The columns of Goll were not diseased. The involvement of the cells of the anterior horn on the side opposite to the cerebral focus was believed to be a part of the degeneration caused by this focus, and the case showed, by the normal condition of the cells in the right anterior horn, that anterior horn disease is not always associated with primary lateral sclerosis. Friedmann believes that all parts of the pyramidal tract throughout its degenerated portion underwent degeneration simultaneously before the hemiplegia occurred, and that a later involvement of the upper limbs was not a proof that the pathological process was ascending. The degeneration was believed by Friedmann to be syphilitic in origin, and the ground for this belief was the endarteritis. He acknowledges, however, that endarteritis may result from different causes, but in his case no cause could be found.

Spiller.

43. Les phénomènes de réparation dans les centres nerveux après la section des nerfs périphériques (The Phenomena of Repair in the Central Nervous System After Section of the Peripheral Nerves). A. van Gehuchten (La Presse médicale. Jan. 4, 1899. p. 3).

In a previous communication, the author has reported his observations that after section of the peripheral spinal nerves, no chromatolysis occurs in the cells of the anterior horns, but that it invariably occurs after the section of the cranial nerves. This has been criticised by Marinesco. Van Gehuchten reiterates his previous conclusion, and explains the method by which any error in observation was excluded. He believes that the experiments reported by Marinesco confirm in a decisive manner his own, although the interpretations put upon them by that author are very different. In regard to the second point, whether the continued separation of the nerve has an effect upon the rapidity of the reparatory processes, van Gehuchten expresses himself