ARTERIOVENOUS ANEURYSMS OF THE SPINAL CORD
A REPORT OF TWO CASES INVESTIGATED BY VERTEBRAL ANGIOGRAPHY
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Vascular tumors of the spinal cord form, according to Merritt,\(^5\) 4 per cent of spinal cord tumors. Some of these tumors are made up of actually growing tumor cells, others are congenitally formed anomalies of the vessels. To the latter belong the arteriovenous aneurysms. According to Wyburn-Mason,\(^4\) Hebold\(^4\) appears to have been the first to describe an arteriovenous aneurysm of the spinal cord. When Wyburn-Mason wrote his extensive monograph in 1943 on vascular tumors of the spinal cord he had found 14 cases in the literature and added 16 of his own. Since then, as far as we know, only a few more have been described. As the cases frequently offer difficult diagnostic problems and certain new views have been advanced during our investigation, we find it worth while to report the following 2 cases.

CASE HISTORIES

Case 1. A-n, L.J.V. A man aged 31 years was admitted to Serafimerlasarettet in July 1956. The first symptom occurred at the age of 10 years (1935), when a playmate accidentally sat on his neck during a game. His neck cracked loudly and he suffered a violent pain at the base of the skull. He was unable to rise or to walk for several hours: the pain decreased, but his neck felt stiff. A week later he suddenly felt extremely severe aching in the back of the neck and vomited repeatedly during the succeeding week. Lumbar puncture showed blood in the cerebrospinal fluid. Roentgenograms of the cervical spine showed no abnormality. He was subsequently well until August 1941, when he suddenly and without known cause had pains and stiffness in the back of the neck. He vomited and remained at home for 2 weeks. During this period he noticed a little weakness and numbness in his legs. Two months later he again suffered aching and stiffness in the back of the neck. The pain now radiated out between the shoulder blades. It was observed that the optic discs were blurred and elevated about 1 dioptre. The patient was therefore admitted in November 1941 to the Neurological Clinic at Serafimerlasarettet.

Examination showed slight unsteadiness of gait, but otherwise nothing of note. An attempt at pneumoencephalography via cisternal puncture was interrupted when blood was obtained immediately. The patient had slight stiffness of the neck for a few days, and was then again symptom free.

The fourth, and thus far last, spinal subarachnoid hemorrhage occurred in 1947 after an accident when the patient was struck on the head by a plank. He was unconscious for a short period and subsequently somewhat dazed and stiff in the neck for 2 weeks.

Since 1948 the patient has had increasing weakness and muscular atrophy in the trunk and extremities. He first observed these changes in the left arm and leg. The
last year he had marked weakness in the right arm and leg also. He complained of slight paresthesia in the form of a sensation of pins and needles periodically in the right hand, but otherwise no impairment of sensibility. During recent months he had had difficulty with defecation and micturition.

State on Examination. The patient’s general condition was poor and he was extremely emaciated. He breathed heavily with extensive use of the auxiliary respiratory musculature. Auscultation of the heart revealed a faint systolic murmur with a maximum at the base. The blood pressure was 120/80. Neurologic examination showed the cranial nerves to be normal. There was considerable spastic paresis in both the trunk and the arms and legs, with general muscular atrophy, which was most pronounced in the musculature of the shoulder and that of the left arm. The patient was a complete invalid because of his paresis, having to be lifted from his bed to a wheelchair, supported with pillows, etc. He showed slight impairment of sensibility for all qualities up to C4. The muscle reflexes were somewhat more lively in the left arm and leg with clonus of the left foot and positive Babinski’s sign bi-

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