

The parts of the occlusion are 8 cases of anterior cerebral artery, and each one case of middle cerebral artery, middle cerebral combined with anterior cerebral artery, and internal carotid artery. Most of these arteries, except last one, occluded at the level of pars supra-optica.

The cases of middle cerebral, middle cerebral combined with anterior cerebral, and internal carotid artery occlusion present each characteristic focal signs. Eight cases of anterior cerebral artery occlusion show each different symptoms includes a case of hemiplegia. Pneumoencephalograms show mostly slightly heavy enlargement especially dominated in the same side of injuries. In the 11 cases, 5 patients had seizures and one of that shows interesting narcolepsy.

104. Four Cases of Carotid Artery Thrombosis, its Surgical and Medical Treatment

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It is a well-known fact that the carotid artery thrombosis in the neck caused occasionally the symptoms of cerebrovascular diseases. 4 cases of carotid artery thrombosis are shown in this report.

No. 1. male, 52 years old

1-carotid artery thrombosis (transient and recurrent type)

treatment: removal of thrombosis and intimaectomy, medication of Indione, healed.

No. 2. male, 53 years old

1-carotid artery thrombosis (apoplectic type)

treatment: injection of Urokinase (fibrolytic enzyme) medication of Indione, healed.

No. 3. male 76 years old

r-carotid artery thrombosis (transient type)

treatment: stellate ganglionectomy, injection of Urokinase (fibrolytic enzyme), medication of Indione, healed.

No. 4. male, 58 years old

bil. carotid artery thrombosis (apoplectic type) only examined.

1) Not only the stenosis of carotid artery causes the symptoms, but also other factors, for instance, vasospasm, hypotension, embolism and also, relate with the episodes.

2) It is very important that the operative re-canalisation has to be indicated in proper timing.

3) The application of the fibrolytic enzyme in the initial stage of the illness is one of the effective treatments.

105. Intermittent Vertebral Artery Compression

—A contribution to the study of the thoracic outlet syndrome—

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10 patients of intermittent vertebral artery compression first described by Powers 1961 are discussed with particular reference to diagnosis, correlation with trauma and surgical treatment. Retrograde vertebral angiography confirms the diagnosis by demonstrating intermittent occlusion upon forced lateral rotation or hyperextension of the head.

Particular stress is placed, first, on oto-neurological examination for diagnosis of brain stem dysfunction due to arterial insufficiency of vertebro-basilar system with electronystagmographic tracing upon rotating or hyperextending the head or upon changing posture. Second, on the supra-clavicular murmur with marked increase of intensity especially upon rotating head with holding deep breath. Third, on X-ray evidence of the cervical rib, elongated transverse process of C7, and higher arch and sharper curve of subclavian artery in pre-operative angiography. These findings are noted in 5 out of 6 patients with post-traumatic onset. One of authors (C. N.) has a speculation as follows. With the subclavian artery well up into the soft part of the neck and above the clavicle, it runs greater risk of injury from trauma and this anatomical variation might play an important predisposition for development of his sort of syndrome following injury. Surgical treatment carried out in 9 cases gave immediate and lasting relief of symptoms.

106. Observation of Cerebral Blood Flow in Intracranial Arteriovenous Malformation

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By means of two techniques, Kr 85 clearance technique by Lassen et al and