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The Combined Pterionally Interhemispheric Approach as a Solution of Double Aneurysms in the Area of Anterior Communicating Artery and Interhemispheric Haematoma and Hemocephalus

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Mini Review

A 47-year-old woman with sudden headaches with clinical progression. The need for intubation and controlled ventilation. The patient wasn't treated for anything. According to the computer tomography examination, massive subarachnoid hemorrhage with interhemispheric hematoma continuing along the corpus callosum in its posterior third this perforated into the cerebral chambers – to the third ventricle and lateral. Enlarged brain chambers to the inset hydrocephalus. Gyrification is wiped out. For examination of an angiographic computer tomography - Fig.1, we find two arterial aneuryms extrusion in the area of the anterior connecting artery exiting through the neck from the right – one goes ventro-caudally and the other goes dorso-cranial and the other part of the anterior cerebral artery. Status classification – Hunt-Hess V, Yasargil - 5, WFNS – grade 5, Botterell -5, Fischer scale 4 [1,2].

Due to the position of the aneurysms and the intehemispheric hematoma, we opt for an exceptional approach combined pterionally interhemispheric. With this approach from pterional side we clamp the aneurym ventro-caudal and interhemispheric approach then we clamp the aneurysm dorso-cranial and evacuate the interhemispheric hematoma and hematoma above corpus callosum. We perform a ventral third ventriculostomy (Stookey and Scarff operation) to prevent the development of hydrocephalus and we train the side chamber – external ventricular drainage with measurement of intracranial pressure. We are making a floating craniotomy. Five days apart, we need to turn floating craniotomy into decompressive craniectomy. Examination by transcranial doppler is regularly carried out by transcranial doppler on the left of physiological flows, without rustle, accelerated at speed, right with higher spectrum with segmental changes in speed and element of higher spectrum, at depth A1 there is no flow symmetrical with the other side, it is biphasic, ingredient of higher spectrum. During inspections, the process of improvement of the process parameters is gradually better. Patient left for complete pulmonary ventilation. Gradually transferred to spontaneous ventilation and with the aim of communication. Due to the long-term need for neurorehabilitation and neuroreanimation, the patient is further treated at the Chronic Care workplace.

Subarachnoid Haemorrhage (SAH) is a life-threatening event with an incidence of six per 100.000 people (for most countries: Finland seems to be an exception with an almost three times higher incidence rate). Case fatality is high, with good outcome in less than half of the patients, despite all efforts to improve the results over the last 30 years [2].

The combined pterionally interhemispheric approach is an approach that is indicated so far very rarely. It is mainly used in the association of an aneurysm on the anterior and middle cerebral arteries, or in the occurrence of 2 aneurysms of low-liyng anterior connecting artery and distal aneurysm on the anterior cerebral artery. This technique performs around 8 cases, 4 of which are performed associated occurring on the anterior and middle cerebral arteries together and 2 on the appearance of associated

on the lower-lying on the anterior connecting artery and distal aneuryms on the anterior cerebral artery. In 2 cases, including our, on their aneurysms projecting in a complex manner [3,4]. We chose the combined approach due to the location of the aneurysm, due to the deposition of the hematoma interhemispherally above the corpus callosum. Access also allowed a very puncture of the side chamber and its training to a typical place (Kocher point). When clamping the Yasargil aneurysm with vascular clamps, it allowed a good overview in the area of the necks of the aneurysm and surrounding vascular structures. The basic philosophy for a surgeon is to see all anatomical structures around the aneurysm (Figure 1).

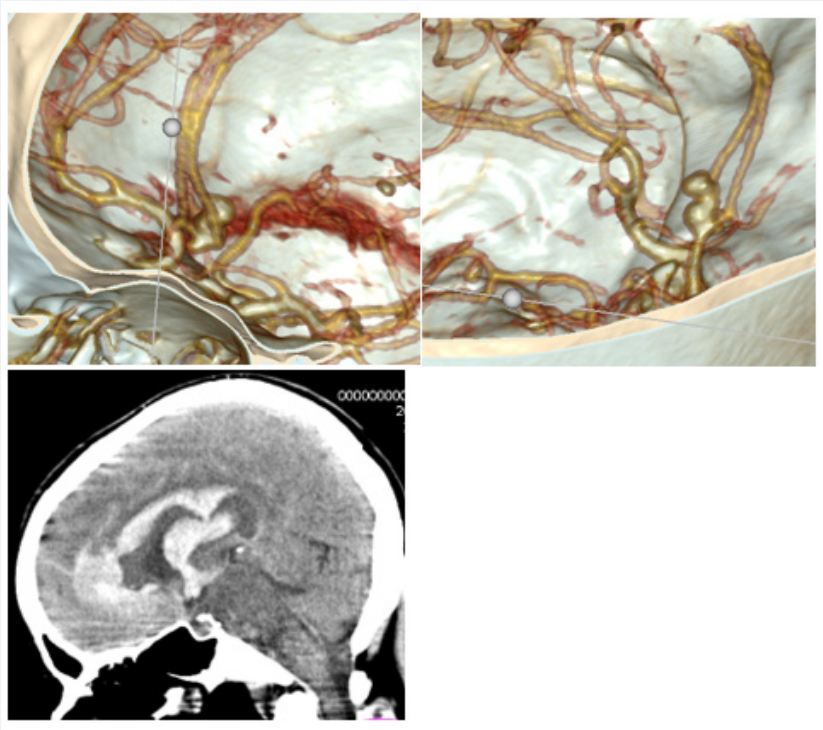

Figure 1:

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