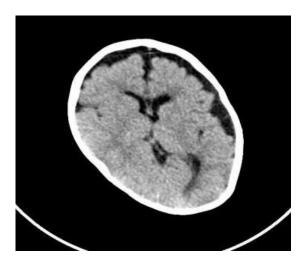
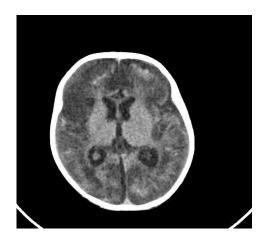
Photo number 1 Child 1month. CMVmeningoencephalitis: the formation of external hydrocephalus, mostpronouncedin the fronto-parietal areas

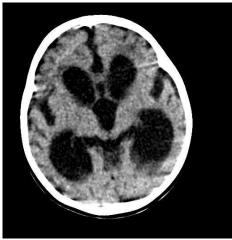


Photonumber 3 Child 9 months. The outcome of CMV meningoencephalitis as external and internal hydrocephalus



#### Photonumber3

Child 6 months. The outcome of CMV meningoencephalitis with the defeat of the paraventricular areas, the formation of substitution of hydrocephalus and cystic transformation of the brain.



Photonumber4 Child 3 months. The outcome of CMV meningoencephalitis with late onset of causal treatment: cystic transforming the brain, secondary asymmetric ventriculomegaly



# Morphological potentialities of external jugular vein in surgery of vertebrobasillar insufficiency

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**Abstracts:** Vein shunting of brachiocephalic arteries in affection of a vertebral and subclavial zone and hypodermic veins of extremities practically isn't carried out today. It is caused by several reasons: time lengthening of operation, additional operational trauma, cosmetic defect, rather good results of endovascular treatment and using synthetic artificial prosthesises. However these researches of the postoperative period after shunting and endovascular operations on vertebral and

subclavial zone are need of improvement and search of new methods of surgical treatment of vertebro-basillar insufficiency. Qualitatively new way of reconstruction of this zone is developed in its occlusionand stenosis affection.

**Key words:** vertebro-basillar insufficiency, vertebral and subclavial zone, syndrome of vertebral and subclavial steal syndrome, external jugular vein, vein shunting.

The problem of surgical treatment of the vertebro-basillar insufficiency (VBI) caused by occlusionand stenosisaffection of vertebral and subclavial zone today is one of the most important in surgery of cerebral vascular diseases. High efficiency of surgical treatment of such patients doesn't raise doubts. It has been established by humerous researches, that sharp violations of cerebral circulation in the vertebro-basillar pool (VBP) clinically proceed heavier, than in carotid, and mortality at a stroke in VBP exceeds that at a stroke in carotid (Antonov I.P., Gitkina L.S., 1987; Gusev E.I., Skvortsova V.I., 2001). Despite numerous types of the reconstructive and endovascular operations performed on this zone, number of development of postoperative complications is quite great. This fact dictates the need of new methods search of surgical correction of VBI. The syndrome of vertebral and subclavial steal syndrome caused by an occlusion of the I-st segment of subclavial artery or brachiocephalic trunk, an occlusion of the I-st segment of the vertebral artery, and also their combination are the main indications to expeditious treatment of VBI. However the question of a choice of treatment a method of the called extracranial affections still have been discussing. Both open operations with use of a compositive material for shunting, and endovascular technologies of stenting are interfaced to postoperative thromboses of a zone of reconstruction approximately in identical proportions. According to research carried out on the basis of department of vascular surgery of Amur regional clinical hospital from 2010 to 2012 25 operations for a syndrome of vertebral and subclavial steal syndrome were executed by: 18 endovascular way and 7 - open. Carotid and subclavial shunting with the use of compositive prosthesis, and endovascular -stenting of the I-st segment of subclavial artery or brachiocephalic trunk was option of open operation. In both groups was revealedone case of postoperative thrombosis of a zone of reconstruction in the remote period. It is necessary to consider that in 10 patients prepared for stenting failed to execute an endovascular operation, and on the general condition open shunting operation for them was contraindicative. As a result this group of patients received conservative treatment which according to control complex vascular and neurology inspection carried out in a month was inefficient.

## Materials and methods

On the basis of department of pathological anatomy of Amur regional clinical hospital 10 corpses were which investigated died not from vascular pathology at the age of 55-74 years man's and female. For research the external jugular vein (EJV) and the big hypodermic vein (BHV) with the subsequent comparative macroscopic morphological characteristic, and also modeling of operations of vein shunting:carotid and subclavial, vertebral and subclavial, carotid and vertebral of reversive EJV were taken.

#### **Results and discussion**

As the most optimum access to vertebral and subclavial zone medial supraclavicular with crossing of clavicular portion of musclewas chosen. EJV from a place of merge of back ear and occipital veins to a confluence of subclavial vein (50%), to an internal jugular vein (40%), to a venous corner (10%) was allocated. Length of this piece was in average 75 mm. EJV inflows in the form of suprascapular and forward jugular veins, and also a trunk were tied and crossed. Further the general carotid, the II-nd segment of subclavial artery with the I-st and II-nd segment of vertebral artery were allocated and operations of carotid and subclavial, vertebral and subclavial, carotid and vertebral vein shunting of reversive EJV were modelled. The length of allocated EJV in all cases was enough for the called options of shunting without a tension. For the comparative macroscopic characteristic of EJV most often used site of BHV (as the vein bypass) was allocated for shins up to 7 cm long. In macroscopic comparison the following data were obtained: in 100% of EJV had only

one valve settling down in the field of merge to the main vein; whereas BHV on the allocated site contained 2-3 valves.

### **Conclusions**

The conducted morphological researches of cadaveric veins indicated the lack of prevailing opportunities of BHV in quality of vein shunting for arterial reconstruction on vertebral and subclavial zone. Modeling of operations on corpses has proved technical capability of carrying out carotid and subclavial, vertebral and subclavial and carotid and vertebral vein shunting of reversive EJV. In many respects efficiency of this operation is defined by technical simplicity of performance from one supraclavicular access, lack of the expressed valvate device, cosmetic effect, absence in need of use compositive prosthesis, and also shortening of operation time. Besides character of the valvate device of EJV indicates to possibility of operations performance of vein shunting of a vertebral and subclavial zone not only reversive EJV, but also by "in situ" technique without valvotomy.

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# Morphological aspects of nonspecific bronchitis with drug-resistant tuberculosis in the lungs

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**Sammary:** In studying the morphology revealed nonspecific bronchitis change as qualitative and quantitative composition of the cell depending on the type and duration of tuberculosis. In the group with drug sensitivity stored in the wall of bronchi defined "limfonoduli", indicating that the establishment of the local bronchus immunocompetent cells, in contrast to groups polyresistance and multidrug resistance.

**Key words:**Bronchopulmonary system, drug resistance.

When drug-resistant tuberculosis changes affect both the pulmonary parenchyma and bronchial tree [1,2]. This process is an integral component of the pathological changes in tuberculosis or diseased parts of the lungs observed in 100% of cases [3]. At the same time there are changes in the bronchi, usually considered as a chronic non-specific inflammation: cellular infiltration and thickening of the basement membrane, metaplasia of the surface epithelium [4,5]. Purpose: Autopsy material to study the morphological changes occurring in the bronchi with drug-resistant tuberculosis.

Materials and methods: The autopsy material covers the 105 patients who died of fibro-cavernous pulmonary tuberculosis in hospitals in Blagoveshchensk. Among the dead was