

in Narkose. Außerdem existieren geeignete Stosswellentherapiegeräte nur punktuell und spezialisierte

Ärzte noch seltener. In Hannover können alle in Frage kommenden Fälle zeitnah versorgt werden.

## CHANGES OF RHEOLOGICAL INDICATORS OF ERYTHROCYTES IN ARTERIAL HYPERTENSION, COMPLICATED WITH MYOCARDIAL INFARCTION AND STENOCARDIA

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It is shown that in the case of arterial hypertension, rheological properties of the main carriers of oxygen and metabolites in blood are disordered, though, in case of cerebral ischemic affections these changes are absent. With appearance of the newest methods of erythrocytes' plastic properties research there also appeared a possibility to specify our conceptions about an intensity degree of hemodynamic disorders in the case of vascular system diseases.

**MATERIAL AND METHODS.** In our research were 12 men, who suffered from an arterial hypertension, complicated with stenocardia, and 12 patients with myocardial infarction, 6 women and 6 men. A control group was 15 healthy patients of proper age, 12 men and 3 women. We have examined main rheological determinants of erythrocytes by straight adequate methods in whole blood. Deformability was examined by diffracting osmoscany method, aggregative properties – with the help of piezodynamic method in a microcuvette on installations. The methods used let us estimate not only integral indicators of erythrocytes' deformability and aggregation, but also assess sphericity (S/V ratio), internal viscosity of erythrocytes, aggregations' solidity and the speed of their spontaneous formation in whole equalized blood. The blood was taken from ulnar vein on an empty stomach in the morning into test tubes with heparin at 150 units/ml.

**RESULTS OF RESEARCH.** Deformability index was heightened in both groups of patients. An Omyn indicator's decrease in both groups of patients is noticed: (159±8) mOsm with arterial hypertension and myocardial infarction and (157±9) mOsm – with stenocardia against (148±7) mOsm in healthy people ( $p < 0,05$ ). Subject to this proviso, a slight decrease of O' indicator is mentioned: (397±9) mOsm and (393±10) mOsm accordingly against (404±12) mOsm in control. Regarding spontaneous aggregation, both minimal (an indicator Uo) and maximum (Oq) aggregates' solidities to mechanical destruction increase, which leads to reliable increase of aggregation index from (1,2±0,4) rel. units in control to (2,3±0,5) rel. units in the case of infarction ( $p < 0,01$ ) and (1,8±0,3) rel. units ( $p < 0,05$ ) with stenocardia. Change of Omyn indicator is less pronounced, but increase of deformability, in comparison with men, is more significant. Strength properties of erythrocytes' aggregations and the speed of their spontaneous formation are higher among women. So, the aggregation speed among women, who suffer from myocardial infarction, increases in 12%, while among men – only in 5%.

**DISCUSSION.** Our research have shown an absence of significant changes of erythrocytes' deformability among patients, who suffer from arterial hypertension with myocardial infarction and bouts of stenocardia, but, reliable change of erythrocytes' sideview with decrease of S/V ratio (change of Omyn indicator) is mentioned, that is swelling of red cells, and also a tendency to dehydration of hemoglobin (O' indicator), that is decrease of internal viscosity of erythrocyte. Regarding sex differences in dynamics of disease, we can presuppose that correction of deformative properties of erythrocytes among women occurs in a more pronounced way, in comparison with men. Though, a risk of ischemic affections, due to a heightened aggregation status among women, is higher.

## CHOICE OF METHOD OF SURGICAL TREATMENT IN CHILDREN WITH ECHINOCOCCOSIS LUNG

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**OBJECTIVES OF THE STUDY.** Improved results of surgical treatment of children with various forms of echinococcosis of the lungs.

**MATERIALS AND METHODS.** Over the last 10 years in the Department of Paediatric Surgery of the Tajik Institute of Postgraduate Medical Training were on the treatment of 152 patients with lung

echinococci. (EL) in various forms. Children aged 2–7 years were 52.8, 10 years – 33, 11–15 years – 67. Solitary echinococcal cyst 144 (94,7%). Bilateral lesion in 8 (5,3%) children. In 16 (10,5%) patients had pulmonary hydatid cyst combined with lesion of the liver. Right-sided localization (59), left-handed (41%). According to the location in tissue lung echinococcus more (126) and other central located, less (26) on the periphery.

Depending on the size and scope of the EC (in the classification of A.T. Pulatova) were small amount of 10–100 ml, diameter of the residual cavity of 4–7 cm (6), medium – 100–250 ml, diameter – 7–10 cm (24), large and huge volumes of 500 or more (71). Among the complicated forms of echinococcosis patients with a breakthrough in the bronchus was 42, in the pleural cavity – 4, a breakthrough in the bronchus and the pleural cavity – 2, suppuration of the residual cavity of the EC – 3, recystic inflammation – 15. In the diagnosis of the disease was mainly used radio logic method of investigation (152). In 106 observations for the diagnosis, the timing and extent of surgical intervention was used ultrasound (U.S.).

**RESULTS AND DISCUSSION.** We used two-stage disclosure of thoracic injuries in 71 patients with large and giant cyst of the lungs. It consisted of the following: first produced torakotsentez dissection of parietal pleura in the course of the wound for 5–10 cm Surgeon finger bluntly and gently detaches contiguous portion of the fibrous capsule, given that it was possible to separate the edge of 4–5 cm and thereby partially exposing cyst. Then sucked all the way to puncture echinococcus fluid, then dissected and removed fibrous capsule chitinous shell. Cavity of the fibrous

capsule is disinfected and loose plugging. Easy fully released from adhesions. In order to prevent recurrence of echinococcosis There are many ways is the use of 1–5% formalin solution. We have 20 (30,4%) patients in the control group was used 2% formalin solution. In this case, bronchospasm, we observed in 5 patients, cardiac arrhythmias (bradycardia) in 4 patients. In the clinic of pediatric surgery until 1996 when centrally located cyst easily applied method, developed by A.T. Pulatov in 1982 – is the creation of artificial interlobar or intersegmental grooves. In this procedure, operated on 56 out of 152 patients, including 13 with complications. In this case, 14% of the 56 patients had complications in the postoperative period in the form of education residual cavity in 2 patients and neparaziterial cyst in one patient. We have been modified to create an artificial interlobar or intersegmental grooves. In this method, operated on 90 children from 152 patients. Complicated by pulmonary EC were 38, the average EC in 16, large lung EC were 20, a giant 16. The technique is as follows: after the disclosure of the residual cavity formed in the hemisphere, further dissected fibrous capsule with minimal thin layer of lung tissue in the course of vessels and bronchi to the bottom within a functioning lung tissue to 2–3 cm excised edge of the fibrous capsule is imposed several eight-shaped, nonabsorbable hemo and aerostatic seams. formed three additional artificial interlobar or intersegmental fissure. When inflating the lung surface of all the fibrous capsule are closed, as the concave surface on the fibrous capsule is completely eliminated. Thus echinococectomy with various forms of lung EC children, our technique is more efficient surgical treatment, postoperative complications of this technique is 9% against 14.8% for traditional ones.