

necessity to define the capacity of blood platelets during the acute period of the disease. To solve the specified problem clinical-laboratory trial of 20 patients was carried out on the basis of Astrakhan State Medical Academy and Regional Clinical Infectious Hospital, Astrakhan, from May till August, 2005. The patients' average age was  $56,6 \pm 4,16$  years old. The disease proceeded in the form of average severity (62%) and severe (38%) forms. The diagnosis was made on the foundation of a complex of anamnestic, epidemiological, clinical-laboratory data and was serologically verified in the IFA reaction to the CCHF virus antigen with the antibody titer of 1:800 – 1:1600. Counting of platelets in the venous blood and the analysis of their aggregative ability were carried out on the analyzer NFP BIOLA (model 230LA). The platelet capacity was evaluated in aggregation value (V %) and speed (S %). ADP in the concentration of 2,5  $\mu\text{Mol}$  was chosen as an inductor.

In 70% of the patients clinical implications of hemorrhagic syndrome in the form of intensive hemorrhagic rash on skin integuments and gingival bleeding were marked. In peripheral blood platelet number decreased up to  $71,2 \pm 5,9 \times 10^9/l$ , and in venous one – up to  $48,5 \pm 4,6 \times 10^9/l$ ; it being  $17,7 \times 10^9/l$  in single cases.

The research results showed that the aggregation value (V%) was strongly decreased as compared to the control values ( $4,02 \pm 0,7$  и  $24,3 \pm 1,4$  при  $p < 0,0001$ ), and the time (Tv) during which platelet activity reached its maximum reduced to  $1'25'' \pm 0,6$  from the regular one of  $4'01'' \pm 0,5$ . The aggregation speed (S) was authentically decreased twofold from the control values ( $7,2 \pm 0,5$  and  $4,3 \pm 1,3$  accordingly,  $p < 0,0001$ ), and the time (Ts) of reaching its maximum - decreased ( $20'' \pm 1,8$  against  $12'' \pm 0,4$ ,  $p < 0,05$ ). The aggregates were of small radius ( $3,5 \pm 0,23$ ), while in donors it was equal to  $6,5 \pm 0,7$ . The discharge reaction of own agonists in the platelet granules was not registered on all the occasions, that gave evidence of the release failure or their absence.

Thus, considerable disorders of hemostasis thrombocyte link in CCHF patients were found out in the result of the research. Perhaps, it is a leading cause of the hemorrhagic syndrome development. That is why, when admitting patients to the hospital, it is necessary to define

the platelet capacity for carrying out the appropriate pathogenetic therapy.

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**METABOLIC AND CIRCULATORY  
DYNAMICS DISORDERS IN TEENAGE  
GIRLS WITH OLIGOMENORRHEA AND  
SECONDARY AMENORRHEA**

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Disorders of menstrual function like oligomenorrhea (OM) and secondary amenorrhea (SA) in teenage girls in most cases are attended by disorders of the cardiovascular system and lipid metabolism functional state. The lipid profile study showed the existence of dyslipidemia of atherogenic character in the majority of patients with the specified pathology. Central circulatory dynamics disorders took place in more than 80% of the cases, only in 6% of the patients the showings characterizing uterus and ovary blood supply fell within the limits of the norm.

Purpose of the work: finding heart, uterus and ovaries vessels Doppler investigation complex of showings for an individual circulatory dynamics state evaluation. For the realization of the purpose Doppler investigation of the heart and vessels of uterus and ovaries in 92 patients with OM and SA was carried out. The estimation of diagnostic value of the obtained showings was carried out according to the system-information analysis of Vald.

The main diagnostic markers of a circulatory dynamics system disorder were: myocardial thickness less than 5mm (yes – RQ = +6; no – RQ = -0,4), fraction of cardiac output less than 63% (yes – RQ = +6,5 ; no – RQ = -2,9), systole blood velocity of the left atrium more than 80cm/sec (yes – RQ = +6; no – RQ = -0,4), relaxation time of the left ventricle more than 0,06 sec (yes – RQ = +5,6; no – RQ = -3),

systole blood velocity (SBV) in the uterine artery less than 30 cm/sec (yes – RQ = +6; no – RQ = -1,5), SBV in the right ovarian artery less than 30 cm/sec (yes – RQ = +8; no – RQ = -2,8), SBV in the left ovarian artery less than 30 cm/sec (yes – RQ = +7; no – RQ = -4,3), difference between SBV in the uterine and the right ovarian arteries more than 10 cm/sec (yes – RQ = +9,4; no – RQ = -1,8), difference between SBV in the uterine and the left ovarian arteries more than 10 cm/sec (yes – RQ = +10,4; no – RQ = -2,3), difference between SBV in the right and left ovarian arteries more than 10 cm/sec, (yes – RQ = +6,7; no – RQ = -0,8).

The sum (-13) testifies to the absence of circulatory dynamics disorders, from (-13) to (+13) – to the initial manifestations of the disorders, the sum of more than 13 testifies the existence of evident disorders which require medicamental correction and physiotherapy. The correction of the specified circulatory dynamics disorders in the teen age in patients with OM and SA will allow preventing serious functional disorders of the cardiovascular system.

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**PSYCHOPHYSIOLOGICAL STATE OF  
NAVAL SPECIALISTS IN THE PERIOD OF  
ACUTE ADAPTATION TO SERVICE  
UNDER CONTRACT**

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The present-day Navy change-over to preferential recruiting specialists doing military service under the contract sets the problem of various ranks navy soldiers' adaptation process in-depth study. While analyzing the research results of the naval specialists' psychophysiological state the ranking on the ground of their military status was used. Depending on the type of business before entering into the contract there were the following groups distinguished: 1) specialists who were called-up to serve in the

Navy 12 months ago (n=170); 2) persons who had their first contract closed (n=90); 3) military retirees (n=100). The research was carried out within 2 years after entering into the contract in 4 stages: primary – at making the contract, and then in 6, 12 and 24 months of the service.

It has been established that the most difficult period of psychological adaptation to military service under contract for the first group persons was the interval between 6 and 12 months of service, which is characterized by considerable lowering of emotional stability levels (by 46,4%), moral dynamism (31,1%), assertion (34,8%). The second year of service of the first group persons was attended with positive personal traits changes: growth of emotional stability levels (by 42,3%), moral dynamism (by 33,3%), assertion (twofold) and was the of psychological adaptation acute phase completion.

The efficiency, stability and reaction rate index dynamics was characterized by the following: compared to the primary research, in 6 months of service the levels of the specified showings of the first group military servants decreased, in 12 months of service the evidence of the specified features decrease was maximal, in 24 months of service the efficiency, stability and reaction rate levels increased considerably. The process of adaptation to service under contract for the first two years was attended with authentic ( $p < 0,05$ ) lowering of adaptive capacities, neuropsychic resistance, communication potential, professional suitability and with moral norm decrease tendency by the end of the first year of service. In the consequence of the comparative analysis of electroencephalogram (EEG) average value showings, compared to the results of the primary survey, in occipital derivations authentic ( $p < 0,05$ )  $\alpha$ -rhythm frequency (within normal diapason), oscillation amplitude, with preservation of reactions to overventilation, closing and opening eyes, and index reduction, that should be evaluated as brain adaptation process inhibition and lassitude development, have been established in 12 months of service. In two years of service the  $\alpha$ -rhythm amplitude and frequency in the occipital derivations grew and reached the index level at primary survey.

In the survey consequence by the second year of service the maximal alteration of the majority of the showings characterizing