the above mentioned these include:1) mostly humoral factors of immune protection; 2) existence of special cells of mononuclear phagocytic system-microglial cells; 3) low capacity to develop interferon . So far, the question remains – what are the qualitative differences in morphological and pathogenetic entity lesion in viral influenza infection.

Our own examinations, performed in the period from 1996, have shown a direct cytopathic effect of influenza A virus (H3N1, H3N2, Yong Kong 1/68) on nuclei of medulla oblongata, parasympathetic nervous system with its primary damage. The neural transport of viruses from the periphery to the CNS is not well investigated but we and other authors have demonstrated on the CBA mice models that n. vagus, nuclei of m. oblongata and brain stem are most affected.

The aim of study is to reveal pathologic changes of brain cortex nervous elements in influenza A virus infection in experiment and to clarify neural disturbance by analyzing their ultra structural findings in mice under experimental influenza virus infection in first 16 days of experiences.

All experiments using live A Hong Kong H3N1 viruses were performed in a biosafety level-3 laboratory approved for use by Georgian Disease Control Center.

Ultra structural and histological appearance also volume fraction of neurons from parieto-temporal cortex in 6-week-old mice were carried out after 24,48-72 hours and 5-16 days of intranasal inoculation of influenza virus A (H3N1 1/62) Hong Kong.

Nerve cells in layer V of the cerebral cortex of mice respond to infection with influenza virus by complex changes: acute swelling, chromatolysis, vacuolization, shrinkage and neuronophagia.

Quantitative changes in the "acute" phase of infection up to 72 hours to testify of cortex cytoarchitectonic in the form of lower differentiation and higher monotony size of neurons with their polarization from very small cells to large, hypertrophied, which is unusual for the "intact" model of brain.

THE STUDY OF MYOCARDIUM REMODELING AFTER INTERVENTIONAL TREATMENT OF ATRIAL FIBRILLATION IN PATIENTS WITH ISCHEMIC HEART DISEASE AND ARTERIAL HYPERTENSION

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OBJECTIVE

To study of electrical myocardium remodeling after interventional treatment of atrial fibrillation (AF) with patients with ischemic heart disease (IHD) and arterial hypertension (AH).

MATERIAL AND METHODS

The research was done according to the plan of research works of Tver State Medical University (Tver). Overall, on the basis of Regional Clinical Cardiologic Dispensary and Hospital of MD RF in Tver 88 patients (average age 58,6 ± 7,4) with IHD were examined. IHD showed itself in the attacks of stable angina of II–III functional classes with the accompanying paroxysmal form of AF. According to Declaration of Helsinki, the patients gave informed consent for the study. The criteria for inclusion into the study were: age not more than 72, verification by previous clinical and anamnestic and instrumental examination of IHD and AH, availability of electrocardiogram (ECG) and/or ECG of AF paroxysm documented during Holter monitoring [6] and radiofrequency ablation (RFA) of increased automatism focuses performed at Federal medical centres (Moscow). All the patients underwent clinical and anamnestic and instrumental examination. We monitored the rhythm to be sinus and as its criterion we considered the availability of P-wave of equal morphology constantly preceding the QRS complex and positive in I-II standard leads. Initially and 24 months after that the examined people were inspected with regard to such factors of P-wave as maximum and minimum in milliseconds (ms) (Pmax and Pmin respectively). We calculated P-wave dispersion – Pdis (in ms). This factor was calculated according to the formula: Pdis = Pmax – Pmin. PQ(R) and QT-intervals were calculated in the similar way as P-wave analysis [4]. The analysis of P-wave length and dispersion, PQ(R) and QT intervals was performed initially before radiofrequency ablation (RFA) and 24 months after intervention.

RESULTS AND DISCUSSION

As a whole, men and women with IHD and AH 24 months after successfully performed RFA had P-wave dispersion and QT interval values lower than before the intervention (by 47.3% and 27.7%, 14.3% and 11.8% respectively; all $p<0,05$). Besides, women showed PQ (R) dis decline (by 31,1%; $p <0,01$). The study shows that its effectiveness was more than 72.7%, which is in agreement with the data of the leading arrhythmological centres of the world [1, 8, 12]. Development and progression of IHD and AH is connected with availability of general atherosclerotic process, emergence of left ventricular hypertrophy, heart rhythm disorders and the appearance of clinically apparent chronic heart failure (CHF) [1, 5, 14, 15]. In turn, this is aggravated by the presence of risk factors with a patient. We must assume that the same reasons lie at the basis of pathophysiological mechanisms of AF developing, causing, fatal cardiovascular events. Including sudden cardiac death [7, 9, 10, 11]. It is known that the basis of most pathophysiological processes with patients with IHD and AH is a defect of heart ultrastructure. The authors consider P-wave dispersion as a predictor of AF paroxysmal form [2, 3, 4, 5, 10, 14]. On the other hand, reduction of Pdis values after RFA foci of increased automaticity might show reverse atrial myocardium remodeling [3, 8, 11, 12, 13]. It is interesting to note that after RFA that supposes some impact on atria structure positive changes also take place in ventricular myocardium. It is known that QT interval represents the duration of the total electrical activity of the heart, and QT lengthening - delayed and asynchronous ventricular myocardium repolarization. The authors connect the increase in QT duration with the risk of the development of ventricular tachycardia paroxysms like pirouette — «torsade de pointes» [7]. Our study shows that patients with IHD and AH accompanied by AF, who underwent RFA, have parameters of ventricular conduction improving. It is believed that in the postoperative period favorable changes are observed not only in atria, but in ventricular myocardium. Apparently, based on the data we can talk about regression mechanisms of arrhythmogenesis after RFA [1, 8].

CONCLUSIONS

72.7% of patients with IHD and AH who underwent interventional treatment of AF had arrhythmia attacks ceased. At the same time, both men and women had decreased values of P-wave dispersion and QT interval. Thus, the given figures can be considered as predictors of reverse electrical myocardium remodeling.

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INTRAKORPORALE HARNABLEITUNG BEI DER ROBOTERASSISTIERTEN RADIKALEN ZYSTEKTOMIE (RARC) — ERGEBNISSE UND ERFAHRUNGEN NACH 50 PATIENTEN

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Die roboter-assistierte Zystektomie (=RARC) wird seit 2005 zunächst in den USA und nun auch in Europa durchgeführt. Erste onkologische Daten bezüglich positiver Absetzungsränder, Anzahl der entfernten Lymphknoten und 5-Jahre-Überleben zeigen keine Unterschiede zur offenen Operation. Vorteile bestehen in der niedrigeren Komplikationsrate, einem verkürzten Krankenhausaufenthalt und einem geringen intraoperativen Blutverlust. Obwohl die Durchführung einer intrakorporalen Harnableitung möglich ist und sich erst durch diese die vollen Vorteile der minimalinvasiven Chirurgie ergeben, werden zur Zeit noch knapp 80% der RARCs mit einer extrakorporalen Harnableitung durchgeführt.

Wir berichten über unsere Erfahrungen bei der Durchführung einer RARC mit intrakorporalem Ileumconduit und intrakorporaler Neoblase und vergleichen die Outcomes.