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NEWS

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of the Institute of Plant Biology and Biotechnology

**БИОЛОГИЯ ЖӘНЕ МЕДИЦИНА
СЕРИЯСЫ**



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БИОЛОГИЧЕСКАЯ И МЕДИЦИНСКАЯ



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OUR EXPERIENCE OF THE SURGICAL TREATMENT OF PRIMARY HEART TUMORS

Abstract. In this article there has been generalized an clinical experience of the surgical treatment of primary heart tumors for the 33-years of the work of cardiac surgery department of the NSCS named after A. N. Syzganov. The clinical manifestation of the heart tumors and the diagnostic methods were described. The surgical treatment is a basic method of treatment in this pathology. The morphology of primary heart tumors are presented.

Key words: primary heart tumors, surgical treatment, heart myxoma, long-term results.

Introduction. In the cardiac surgery practice the primary heart tumors are related to rare diseases. According to literary data they are found in 0,01–0,5% of cases from total quantity of heart diseases. Taking into account extremely unfavorable prognosis in the development of this disease and a good long-term result of modern operation, the problem solution of the surgical treatment of heart tumors is extremely relevant.

The aim of research – evaluation of the long-term results of the surgical treatment of primary heart tumors.

Material and methods. The analysis was based on the results of 99 hospitalized patients since 1983 till 2016. The age of patients varied from 7 years till 67 years (on average – 37,5 years), while 65% were females. The greatest group (93%) was made by patients of working-age from 21 till 54 years. In 82 cases a tumor was located in the left atrium, in 13 patients – in the right atrium, in 2 patients – in the right ventricle, in 1 patient – in the left ventricle and in 1 case – in both atria simultaneously. The NYHA classification was used for evaluation of severity of a functional class that provides the distribution of patients into 4 classes, while there was used the classification of N.D. Strazhesko and Ch.F. Vassilenko that provides the stages of the circulatory disorders. According to data of classification 38 patients were related to IV class, 48 patients – to III class and 13 patients – to II class; the circulatory insufficiency of the I stage was found in 11 patients, II Astage – in 51 patients, II Bstage – in 37 patients that testifies to severity of hospitalized patients [1].

Before hospitalization 12 (12%) patients were on disability, 75 (75%) patients were engaged in a work, 5 (5%) patients were pupils, 8 (8%) patients were retired. These data testify to a necessity of the surgical treatment for faster social rehabilitation of patients [2].

Results. 95 patients underwent a surgical treatment. 3 patients died in the hospital at the stage of examination and preparation for operation during the period of the development of these operations in our center. According to data of pathological and anatomical autopsy 2 patients died of an obstruction of the

left atrioventricular orifice with tumor, and 1 patient died due to development of an acute cardiac and pulmonary insufficiency. One patient was discharged from the hospital having refused the offered surgical treatment. The diagnosis of a heart tumor serves as a basis for the surgical removal of a tumor by urgent indications. Operations were performed according to common rules of oncology which means that there was performed a maximum resection of nearby tissues with following closure or plastic repair of the formed defect. In cases when the radical excision of the heart tissue was not possible owing to complex anatomical structure, there was performed an electric coagulation, a maximum resection of a place of tumor [3].

Long term results of the surgical treatment of patients with heart tumors in the term from 3 till 12 years have been studied in 65 patients of 94, discharged from the hospital (69 %). 29 males and 36 females aged from 27 till 59 years were observed.

Evaluation of the long term results was carried out on the basis of clinical and instrumental investigation, including electrocardiography, chest X-ray and EchoCG. In accordance with clinical results, the observed patients were divided into 3 groups: with good, satisfactory and unsatisfactory results. One patient died of developed cardiac and pulmonary insufficiency due to progression of the leiomyosarcoma.

The group with good results included 48 patients with significant improvement of the condition, in which the physical activity did not cause dyspnea, tachycardia and fatigue. They led healthy lives, a working ability was restored, there was a positive dynamics of the objective methods and investigation (ECG, X-ray data, EchoCG). According to their condition the patients were transferred to functional class higher by 2 classes.

The group with satisfactory results included 10 patients, in which, there was an improvement of the condition as well, but it is less expressed than in first group. Usual physical loading caused dyspnea, palpitation, fatigue. They have the signs of the moderate heart decompensation in great blood circulation saved that we had to use periodically the cardiotropic medicines. The positive dynamics of instrumental methods of investigation in patients of this group was less expressed. According to their condition the patients were transferred to functional class higher by 1 class.

The group with unsatisfactory results included 2 patients which did not have any improvement after operation and any positive dynamic on the side of methods of an investigation. According to their condition the patients remained in the same functional class. We have estimated the long term results the following way.

Long term results of the surgical treatment of patients with heart tumors

Results of operations	Quantity of patients	%
Good	52	80,0
Satisfactory	10	15,4
Unsatisfactory	2	3,1
Died	1	1,5
Total	65	100

Conclusion. Myxomais the most common form (95,9%) among primary heart tumors being localized predominantly in the left atrium (86%), rare in the right atrium (12 %), where in majority of cases it is attached by fibrous leg to atrial septum in the oval fossa (90%). The diagnosis of heart myxoma is an indication for urgent operation in order to avoid an occlusion of the atrioventricular orifice and fragmentation of a tumor with development of the acute arterial obstruction. Good long term results of the surgical treatment of benign heart tumors 52 (80%) contribute a social rehabilitation of patients and restoration of their working ability. [4].

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ЖҮРЕКТИҢ БІРІНШІЛІК ІСІКТЕРІН ОТАЛАУ ЕМІНІҢ ТӘЖІРИБЕСІ

Аннотация. Мақалада А. Н. Сызганов атындағы Ұлттық Ғылыми Хирургия Орталығы кардиохирургиялық бөлімшесінің 33-жылдық жұмысы барысында жүректің біріншілік ісіктерін хирургиялық жолмен емдеудің клиникалық тәжірибесі жалпыланған. Жүрек ісіктерінің симптоматикасы әрі диагностикалық әдістері сипатталған. Аталған сырқаттың негізгі емдеу жолы – хирургиялық әдіс. Жүректің біріншілік ісіктерінің морфологиясы берілген.

Түйін сөздер: жүректің біріншілік ісіктері, оталау емі, жүрек миксомасы, алшақ нәтижелері.

А. В. Квашнин, И. Е. Сағатов, Н. С. Досмаилов, К. О. Оңғарбаев, Ж. Б. Кошкинбаев

Национальный научный центр хирургии им. А. Н. Сызганова, Алматы, Казахстан

НАШ ОПЫТ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ПЕРВИЧНЫХ ОПУХОЛЕЙ СЕРДЦА

Аннотация. В статье обобщен клинический опыт и отдаленные результаты хирургического лечения первичных опухолей сердца за 33-летний период работы кардиохирургического отделения ННЦХ им. А. Н. Сызганова. Хирургический метод является основным в лечении данной патологии. Оценена социальная реабилитация пациентов после удаления миксом сердца в отдаленном периоде.

Ключевые слова: первичные опухоли сердца, оперативное лечение, миксома сердца, отдаленные результаты.

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