

THE INFLUENCE
OF ATHEROSCLEROSIS AND
CORONARY HEART DISEASE ON INDEXES
OF SURVIVAL OF PATIENTS WITH CARDIAC
RHYTHM AND CONDUCTION DISTURBANCES

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Rezumat

Influența aterosclerozei și a bolii coronariene asupra indicilor supraviețuirii bolnavilor cu dereglare a ritmului și a conductibilității cardiace

A fost determinată influența bolii coronariene și a aterosclerozei asupra indicilor supraviețuirii bolnavilor cu dereglare a ritmului și a conductibilității cardiace în baza catamnezei.

Cuvinte-cheie: *indicii supraviețuirii, catamneză, mortalitate*

Резюме

Влияние атеросклероза и ишемической болезни сердца на показатели выживаемости больных с нарушением ритма и проводимости сердца

Определено влияние ишемической болезни сердца и атеросклероза на показатели выживаемости больных с нарушением ритма и проводимости сердца на основе катamnестического наблюдения.

Ключевые слова: *показатели выживаемости, катamnестическое наблюдение, инверсное число дожития, летальность*

Introduction

As it is known, in cases with chronic diseases the most effective criteria for assessing the quality of treatment are indexes of the mortality rates.

To assess the effectiveness of the quality of medical care of patients with cardiac rhythm and conduction disturbances these criteria are not suitable because they do not take into account the decisive role of disease duration and nature of the underlying disease [4].

Methods of assessment of the effectiveness of medical care of patients belonging to this group are not developed by this time also [1, 2, 3].

Only information about survival rates of patients and probable number of patients' survival with homogenous age, sex, and main disease groups can give the most reliable data of the effectiveness of chronic diseases prevention [4].

We didn't come across the information about the assessment of the efficacy of treatment and work organization of medical institutions in prevention of the disorders of cardiac rhythm and conduction in the available literature.

The aim of research: to apply survival rates and probable number of survival in the assessment of quality of health care of patients with disorders of cardiac rhythm and conduction.

Materials and methods

As a result of the five-year catamnestic observation of 530 patients with disorders of cardiac rhythm and conduction we obtained the information about the number of deaths among them and those who left for other reasons per each year of observation.

To calculate the survival rates of patients and probable number of survival the technique of A.M. Merkova [4] was used. The countdown was held from the moment of the appearance of the first signs of the disease or from the date of the first registered visit to doctor.

Results and discussion

We calculated the survival rates of patients with cardiac rhythm and conduction disorders during the investigation depending on the underlying disease. The countdown was held from the date of the first registered visit to a doctor.

Table 1

Survival rates and probable number of survival of patients with cardiac rhythm and conduction disorders depending on the underlying disease during the period of 2007-2011

Years of observation	Underlying disease				All types of cardiac rhythm violation without taking into consideration underlying disease	
	Coronary heart disease		Atherosclerosis with hypertension and without hypertension		Survival in a given year (percentage)	Probable number of survival per 1000
	Survival in a given year (percentage)	Probable number of survival per 1000	Survival in a given year (percentage)	Probable number of survival per 1000		
First	97,7	977	98,5	975	97,6	966
Second	97,3	931	96,8	933	97,4	930
Third	95,4	887	96,7	891	97,0	893
Fourth	93,3	809	96,0	845	96,9	855
Fifth	90,7	725	92,6	773	96,3	814

As we can see in the table, the survival of patients with cardiac rhythm and conduction disturbances and the probable number of survival for five years is gradually reducing, indicating a constant disease progression; moreover decrease of survival rates shows a pronounced dependence on the underlying disease.

For instance the survival rate of the patients with cardiac rhythm and conduction disturbances which occurred alongside with coronary heart disease (CHD) reduced from 97.7% for the first year of observation to 90.7% for the fifth year of observation; also the survival rate of the patients with cardiac rhythm and conduction disturbances which occurred alongside with atherosclerosis with hypertension and without hypertension – from 98.5% to 92.6%.

The dimensions of the indexes of survival rates also determine the number of survived patients till a particular year of observation.

Only 773 patients with cardiac rhythm and conduction disturbances which occurred alongside with atherosclerosis attain the fifth year of observation out of 1000 patients.

Likewise, only 725 patients with cardiac rhythm and conduction disturbances which occurred alongside with coronary heart disease (CHD) live till the end of the fifth year of observation out of 1000 patients.

Of course, decrease of the indexes of survival rate depends on the age of patients also. Taking in consideration this fact, we calculated the indexes of five-year survival rates among patients of the same age with various major diseases.

Among patients with cardiac rhythm and conduction disturbances which occurred alongside with atherosclerosis aged 60-69 years only 611 patients live till the end of the fifth year of observation, and in case of patients with cardiac rhythm and conduction disturbances which occurred alongside with coronary heart disease (CHD) – only 446 patients.

Conclusions

1. The indexes of mortality rate is not suitable for assessment of the quality of medical care of patients with cardiac rhythm and conduction disturbances.

2. Indexes of survival rates of patients and probable number of patients' survival with homogenous age, sex, and main disease groups are the most reliable criteria in assessment of the quality of medical care of patients with cardiac rhythm and conduction disturbances.

Prospects for further research. The information we have got as a result of conducted research give us a possibility to determine the most purposeful ways in the development of measures aimed at improvement of quality of the medical care of patients with cardiac rhythm and conduction disturbances.

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