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Methods for predicting the risk of myocardial infarction in the adult population

Cardiovascular diseases continue to occupy the first place among causes of death in the industrially developed countries. Among them the leading role is played by an acute myocardial infarction. The World Health Organization and other international agencies pay special attention to the problem of myocardial infarction, prevention of morbidity and complications. In Ukraine, about a quarter of deaths of the working population from coronary heart disease accounts for its acute forms [1].

A number of studies have noted the influence of social, biological, psychological, natural and climatic factors on the occurrence and development of myocardial infarction. However, the role of these factors is insufficiently studied and their prognostic value is not clearly defined [2, 3].

Prediction - the process of developing a forecast in order to obtain scientifically sound data. All the studied factors are the basis of the developed method of predicting the risk of myocardial infarction among the adult population.

There are methods of population and individual prediction of myocardial infarction.

The method of population forecasting includes data on the prevalence of this disease for a certain number of years, which are obtained as a result of statistical analysis.

We used the method of individual prediction of myocardial infarction in the adult population. Was used developed by A.A. Gubler method of inhomogeneous sequential recognition procedure. This technique is based on a sequential analysis of Wald. The forecasting methodology was based on the development of prognostic tables consisting of risk factors for myocardial infarction (30 factors). Prognostic factors were calculated for each information group. The assessment of risk groups was carried out on the basis of determining the sum of individual values of prognostic coefficients. The calculation was stopped when the total amount reached a higher or lower threshold value (± 13).

On the basis of the received data allocate three prognostic groups:

1 group. The sum of prognostic coefficients -13 and less - there is no risk of developing the disease.

2 group. The sum of prognostic coefficients from -12 to +12 - the risk of developing the disease is probable.

3 group. The sum of prognostic coefficients +13 and more - the risk of developing the disease is high.

This forecasting technique consists of the following stages:

1. Determining the respondent's affiliation to a certain prognostic group for the risk of myocardial infarction.

2. Dynamic observation of the respondent depending on the prognostic group.

3. Development of preventive measures to reduce the risk of myocardial infarction depending on the prognostic group.

The practical value of the presented methodology of prognostic assessment of pathological processes is due to its versatility, simplicity and the possibility of phased use during any of the periods of pathology with adjustments to medical tactics.

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