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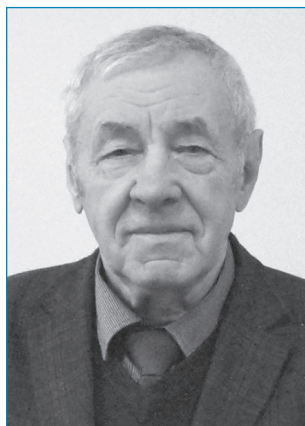
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СОВРЕМЕННЫЙ ПОДХОД В ФУНКЦИОНАЛЬНОЙ ОЦЕНКЕ АДАПТАЦИИ СПОРТСМЕНОВ С НАРУШЕНИЕМ РИТМА СЕРДЦА

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Информация для связи с автором:
nataliya_lutkova@mail.ru

Кандидат медицинских наук, доцент **В.Ф. Лутков**¹
Кандидат медицинских наук, доцент **Л.Л. Миллер**¹
Кандидат медицинских наук, доцент **Г.И. Смирнов**¹
Кандидат педагогических наук, доцент **Д.И. Шадрин**¹

¹Национальный государственный университет физической культуры, спорта и здоровья им. П.Ф. Лесгафта, Санкт-Петербург

MODERN APPROACH IN FUNCTIONAL ASSESSMENT OF ADAPTATION OF ATHLETES WITH HEART RHYTHM DISORDERS

PhD, Associate Professor **V.F. Lutkov**¹

PhD, Associate Professor **L.L. Miller**¹

PhD, Associate Professor **G.I. Smirnov**¹

PhD, Associate Professor **D.I. Shadrin**¹

¹Lesgaft National State University of Physical Education, Sports and Health, St. Petersburg

Аннотация

Цель исследования – выявить типы нарушения миграции ритма сердца и их влияние на адаптацию спортсменов с очагами хронической инфекции и признаками дезадаптации.

Методика и организация исследования. Обследовали 421 спортсмена квалификации от I разряда до мастера спорта. Комплексное врачебно-функциональное обследование включало клинические и инструментальные методы обследования (ЭКГ, «Ритмокардиоскоп РКС-01»). Оценивались состояние здоровья спортсмена, электрическая функция сердца, выявлялись нарушения ритма сердца, рассчитывался индекс функционального состояния по параметрам корреляционной ритмограммы.

Результаты исследования и выводы. Одной из задач контроля функционального состояния спортсменов является выявление ранних признаков синдрома перенапряжения (стрессорного повреждения сердца), возникающего у них в условиях несоответствия физической нагрузки функциональному адаптационному резерву организма. В статье обосновывается целесообразность применения специальной методики: электрокардиографии и корреляционной ритмографии для выявления типов миграции водителя ритма и расчета индекса функционального состояния для спортсменов с нарушением ритма сердца. Показатели активного и пассивного типа сочетаются со снижением индекса функционального состояния спортсмена, они являются предвестниками кардиальной патологии, развивающейся при чрезмерной физической нагрузке, и приводят к снижению работоспособности спортсмена.

Ключевые слова: миграция ритма сердца, корреляционная ритмография, адаптация, дезадаптация, стрессорная кардиомиопатия.

Abstract

Objective of the study was to identify types of heart rhythm migration disorders and their impact on the adaptation of athletes with foci of chronic infection and signs of maladaptation.

Methods and structure of the study. 421 athletes of qualification from the 1st category to the master of sports were examined. A comprehensive medical and functional examination included clinical and instrumental methods of examination (ECG, RKS-01 Rhythmocardiograph). The health status of the athlete, the electrical function of the heart were assessed, heart rhythm disturbances were detected, the index of the functional state was calculated according to the parameters of the correlation rhythmogram.

Results and conclusions. One of the tasks of monitoring the functional state of athletes is to identify early signs of overstrain syndrome (stress damage to the heart), which occurs in them under conditions of inconsistency of physical activity with the functional adaptive reserve of the body. The article substantiates the expediency of using a special technique: electrocardiography and correlation rhythmography to identify types of pacemaker migration and calculate the functional state index for athletes with heart rhythm disturbances. Indicators of active and passive types are combined with a decrease in the index of the athlete's functional state, they are harbingers of cardiac pathology that develops with excessive physical exertion and lead to a decrease in the athlete's performance.

Keywords: heart rate migration, correlation rhythmography, adaptation, disadaptation, stress cardiomyopathy.

Введение. Одним из методов исследования адаптации сердца спортсмена к тренировочным и соревновательным нагрузкам является вариационная пульсометрия и ее математический анализ по методу Р. М. Баевского [1]. Сочетание этого метода с активной ЭКГ-ортопробой дает возможность выявления ранних признаков стрессорной кардиомиопатии и ее видов в зависимости от типа перенапряжения неспецифической реакции стресса [4, 6, 7, 9].

При нарушении функции автоматизма сердца вследствие миграции водителя ритма (МВР) из синусового узла в предсердия или атриовентрикулярный узел необходимо применение другой методики: сочетание метода электрокар-

диографии и корреляционной ритмографии. Эта методика позволяет определить тип МВР, индекс функционального состояния сердца и тем самым оценить адаптацию спортсмена с нарушением функции автоматизма. МВР у спортсменов наблюдается в два раза чаще, чем у неспортсменов, и составляет от 11,1% до 48,5%, она имеет различный генез и требует индивидуальной оценки характера адаптации [2, 5].

Цель исследования – выявить типы нарушения миграции ритма сердца и их влияние на адаптацию спортсменов с очагами хронической инфекции и признаками дезадаптации.

Методика и организация исследования. Обследовали 421 спортсмена квалификации от I разряда до мастера спор-