

ORIGINAL STUDY

**INDIVIDUAL AVAILABILITY TO SPORTS TRAINING IN THE
YOUNG ATHLETES OF GALATI COUNTY**

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ABSTRACT

Sports training is structured as a process which is spaced out during the entire school year, lasting for several years, as this is the only premise for the achievement of important and stable cumulative effects. Each step on the path of performance requires a higher level of training effort. Evincing the peculiarities of each individual (culture level, living standard, environment, health level, skill level, psycho-affective motivation, physical and functional development, effort capacity, performance level, character, sporting life regime, diet), aids the coach act selectively or set additional objectives.

KEYWORDS: *athletes, clinical examination, anamnesis*

1. Introduction

High performance sport constitutes a pedagogical process through methodology, an educational act through the principles governing it and the effects at behavioural level, in the athlete's attitude [1].

The inventory of the indices constantly combining to obtain high performance in sports is an open domain, as observations and deep insight into this may evince their increase [2].

Increasing the health level in each athlete is fundamental. A good level of health is maintained by periodic clinical exams, an adequate correlation

between training intensity and the individual effort capacity, as well as the alternation of hard effort with recovery stages. After illness or injury, an athlete has to restart training only after complete recovery, thus making sure that progress will be satisfactory.

Injuries may be prevented if all safety measures are taken; mobility increases over the required level; muscles, tendons and ligaments are strengthened, especially in the stage of initiation for beginners the muscle force and elasticity is developed up to a level where it is highly unlikely for athletes to get injured, even if they perform movements that they are not accustomed to.

The present article aims at identifying the medical problem at an early stage, following the evolution of the organism when faced with sports effort and spotting the symptoms of overtraining in the young athletes in the Galati County.

2. Material and methods

The study was performed within the interval May 2009- November 2009, on a lot of 60 volunteer male athletes aged 14-16, all members of CSS and LPS Galati and Braila.

At the beginning of the medical exam, which is crucial both in finding the sports-related medical diagnosis, and in the accurate allotment to study groups, the sports-related medical anamnesis was performed in June. The data were gathered according to the standard form comprising: medical history (heredocollateral, physiological and pathological, dietary habits, working and living conditions); sports history; present state; present situation.

Referring to the heredocollateral history, questions were asked about the diseases that the parents and other family members (close relatives) may have suffered from. Relative to the personal physiological history, data were collected on the type of birth (normal or C-section), the APGAR score, full-term or premature delivery, childhood development. Relative to the pathological personal history, the main illnesses the subject has suffered since childhood up to the anamnesis moment.

Upon the initial medical anamnesis in June, in order to make sure that the athletes included in the study are in good health, the general and apparatus-specific exam was performed, according to the standard form, by means of general methods of clinical investigation (inspection, palpation, percussion, auscultation).

The general clinical exam took place in the Laboratory of functional explorations, effort capacity

testing and physical development assessment, "Dunarea de Jos" University of Galati.

3. Results

In June the athletes were at the beginning of the competition stage, with a number of 6 2-hour training sessions per week at a 90% effort intensity, consisting in specific training and emphasising technique. All the registered athletes stated that they coped well with the effort during the training sessions and competitions, easily getting in shape. The main performance objective of the season was the Junior National Championship in July, held in Bucharest.

The research focused on strictly genetically determined hereditary diseases, diseases with hereditary predisposition or family aggregation diseases. No heredocollateral history of haemophilia, diabetes, HTA, parasitoses, heart condition, cancer, rheumatism, TBC was found.

88% of the subjects were delivered by normal childbirth, the APGAR score being 10 for 86% of the cases. Childhood development was harmonious, normal for all the subjects under study.

65% of the subjects suffered from eruptive diseases. They had no history of streptococic angina, pertussis, hepatitis, gastritis, respiratory diseases, cardiovascular diseases, and metabolic, immune or endocrine diseases.

When questioned about their dietary habits, spice consumption, food preparation techniques, use of exciting substances for the central nervous system. Their diet is generally balanced, diverse, and the appetite is good in all subjects. It was found that 53% of the subjects prefer meat and sweets, while 25% prefer fats and fried foods. Only 3 subjects prefer spicy foods. All subjects are non-smokers and do not drink alcohol. All subjects drink more than 2 litres of liquids per day, 88% drink at least a glass of Coca Cola daily. 20% live in smoking families (passive

smoking). 88% supplement their diet by ingesting polyvitamins and polyminerals.

The subjects were also questioned on their working and living conditions. All subjects have a sound home, with families of 3-5 members, without overcrowding. No discontentment or conflicts were signalled.

Regarding their sports history, the subjects included in the study practised the programme of school physical education as the initial form of physical education, being later selected (primary selection), admitted and enrolled in the CSS and LPS Galati and Braila. All the athletes had already practised high performance sports for 4-8 years, the primary selection taking place at the age 8-10.

The athletes included in the study did not exhibit subjective issues and declared that they enjoy training, have a good appetite, sleeping a total of 8 hours of undisturbed sleep per night.

All athletes had a normal general state with a normal facies, the teguments and mucous tissues normally coloured, warm, with normally distributed pilosity, with no alterations of hair, teeth or nails, and impalpable superficial ganglions.

At the level of the respiratory system, the following were found: unobstructed respiratory paths, normal thorax, bilaterally equal respiratory moves, present pulmonary sonority, present vesicular murmur, no wheezing. The respiratory frequency was within normal limits (an average of 16-18 respirations/minute).

In point of the cardiovascular system, the following were found: normal values for the pulse and blood pressure (CF 60-80 beats/minute, BP 120/70 mmHg), rhythmic cardiac sounds, no additional sounds, permeable veins, pulsatile arteries.

In point of the digestive system, the following were found: humid, normally coloured mucous of the mouth, no cavities, supple abdomen, no pain spontaneously and when pressed, mobile when

breathing. The liver is placed 2 cm below the ribs, impalpable spleen, normal intestinal transit.

Regarding the urinary apparatus, the following were found: no obstructions in the kidneys, negative Giordano, physiological miction.

Relative to the locomotive apparatus, the following were found: normal tone and mobility of the muscular system; mobile, sound osteoarticular system, normal segmental axes. The spine was found to be mobile, unpainful, with normal physiological curvatures.

At the level of the nervous system, it was found that all athletes are temporally and spatially orientated, with superficial and deep sensitivity within normal limits and bilateral ROT.

4. Discussions

Getting into physical shape is closely linked to the accurate distribution of the training session, as its result. Two fundamental requirements should be considered. The former is achieving the maximum effect, and that is why the training effort should be at the highest charging level [3].

The latter fundamental requirement refers to the training strain, which should not be so tiring that the athlete cannot recover for the next day, resting within the necessary limits (the professional effort is also taken into account when necessary).

The approach of training during a school year divided into two macro cycles refers to high performance athletes with a rich season of indoors competitions and contests considered as high responsibility.

This bicyclical annual distribution is the consequence of the fact that it is possible to take efficient training sessions and participate in indoor competitions in winter, in similar circumstances as on a stadium in summer. In this case, important progress is made in the athletes' training level, as a result of

the participation in numerous contests whose results allow a better control of the training process. On the other hand, the athletes' emotional level is superior, as a natural consequence of the two competition seasons [4].

As regards the dosage of effort load and intensity, coaches also have to be extremely careful about the rational alternation of sporting activities and the pauses necessary for the recovery of the body's work capacity, especially because the high workload and increased training intensity—so necessary to getting into shape as an athlete—may determine an activity regime carried on against a background of prolonged fatigue, which absolutely need be avoided [5].

Regarding the guidance of sporting shape, it may well be stated that the relevant issue is the optimum rapport between the time of competition training and the time allotted to recovery. It is considered that the most important instrument in guiding sporting shape is a well structured, well managed competition programme. It means taking into account the total number of contests, the number of important starts, the time interval between contests and the efficiency degree of the contests in season [6].

Maintaining a good sporting shape is a crucial concern for specialists, and it is possible to maintain it for a relatively long time, which is supported by the

fact that many athletes repeatedly adjust their personal records within a competition season. This is possible due to the better conditions of training, and especially the increase of the scientific basis of instruction, allowing the ever safer and more effective guiding of sporting performance, according to the competition objectives [7].

5. Conclusions

All the athletes included in the study were diagnosed as clinically healthy upon the objective exam.

No symptoms of overexertion during training were found in the athletes in the study.

The athletes got into physical shape fairly easily, and did not suffer from any injuries or illnesses since the initial medical anamnesis.

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