172 - CAUSES AND CONSEQUENCES TO OVERTRAINING

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INTRODUCTION

The overtraining is a syndrome characterized by fatigue and low performance precipitated by factors of stress arising from excessive training in the absence of adequate recovery. Specifically can be defined as an imbalance between training, competition and recovery. Other factors stressors (social, educational, occupational, economic, nutritional and excessive travel), can contribute to this syndrome. With heavy training, transient symptoms, signs and changes can be diagnosed through tests. These symptoms are the Temporary overrreaching called. The individual in this state is recovering, with the disappearance of the signs in about 2 weeks. Usually the overreaching is caused as a vital part of training for improved performance. A good physical preparation is to maximize the athletic performance and minimize the risk of injury and fatigue, and consequently the risk overtraining. A training session, can lead to an increase in physical fitness and / or increase in fatigue. Fatigue is different from exhaustion, which is characterized by an inability to performance at a given level of energy demand. Attaches itself to stop the procedure, chronic and acute exhaustion in the process. The overtraining is characterized by a chronic and persistent fatigue. The more relevant question for technicians and athletes is to develop a training program, which produces a maximum performance aiming at a specific future competition, with a minimum of risk of emergence overtraining? But does this performance is achieved through the establishment of chronic fatigue? How many training sessions and it is the combination of intensity, duration and frequency are necessary to improve performance? What criteria should be used to increase the overload of training. " It is obvious that the experienced training days before a competition depending on the intensity and duration can determine a negative effect on performance. What can happen is the induction of peak performance before the race. The peak performance is a predictor of performance, and the peak occurrence is an index of stress. The critical determinant for the performance that is up are: high burdens of training, daily training and rapid decline in the state of fatigue. The biological principles involved in sports training are: Length, overload, intensity, frequency, reversibility and specificity, where all athletes with their coaches have to comply with these guidelines so that your plans and goals are achieved. And they have an awareness that the victory of independent health promotion is in first place, is taking care of health that emerged victorious performances. Overtraning The term is often used to describe the athletes who suffer from a prolonged and chronic fatigue. This text has been chosen this terminology, because the translation is closest to the English word "overtraining." Treatment requires rest and a re the training, for a period longer than 3 months. Several other terms are found in the literature, related to overtraining, including: "burnout", "staleness" syndrome of chronic fatigue, "overwork", "overloadtraining", "overfadigue", "overstrain" and mismatch of adaptation. In summary, the authors define the overtraining as heavy training without proper recovery (pathological), as overreaching and heavy training with adequate recovery (normal). A training session for causing a state of fatigue. This state should not be confused with the state overtraining, which is a state of chronic fatigue and widespread. The mechanisms of acute fatigue depend on the duration and intensity of exercise. Among the various types of training, the far-between intensive training, which consists of a few minutes of intense exercise repeated several times with short periods of recovery, is the most likely precipitator of overtraining. In terms of fatigue, a velocity can fatigue in seconds in combination with high levels of lactate, while a Marathon runners may reach the fatigue around 2 hours due to the depletion of glycogen. The overtraining intentional can be planned as part of the training program to stimulate an even bigger adjustment. This is followed by a rest period or a decrease in the intensity of training, to promote a super in a period of one to two weeks (KUIPERS, 1998). Athletes can only be classified as overtraining if they are with the performance with low and high fatigue. In addition, athletes can complain during the rest of fatigue, demotivation, low power and spirit of competition, discouragement and incompetence in the task, emotional imbalance and loss of libido. These symptoms are often accompanied by increased anxiety and depression (90%), irritability (70%) and problems of sleep (90%), including nightmares and sleep intermittently (MORGAN, 1987). There are also records a loss of appetite and strength, very sore muscles and excessive sweating. The athletes seem to be more susceptible to infections and injuries. The occupation of the area of physical activity and / or sport should be attentive to their students, either in the park or in the academies, thereby justifying their work, planning the correct way to the training that these individuals are not forced to temporarily stop the training, from 2 weeks to 3 months, and possibly even a year. The importance of studying the overtraining is to preserve the career, and especially the physiological integrity of the athletes they are high-level or not. In due course go further on this matter, which is very complex, but very interesting for all professionals, athletes and teachers of physical education.

DIAGNOSTIC, CAUSES AND CONSEQUENCES TO OVERTRAINING:

When diagnosed the condition overtraining is due, among other things: Reduce the volume and intensity of effort; Using massage and other forms of active recovery (sauna, hydrotherapy etc.). Use recreational activities and exercises for relaxation and relaxation; Using food rich in energy substrates, corresponding to the energy expenditure; Using psicoterapia.O is the physical fatigue is understood as a phenomenon that occurs in the body, caused by agents of stressful training programs implemented. May appear as: general physical fatigue: the result of an intense and prolonged labor (usually a result of intense efforts aerobic and anaerobic). The general physical fatigue affects various muscle groups used in the effort. The main reasons are: Reduced levels of muscle and liver glycogen; Dehydration; Microtraumatismos of myofibrils, responsible for the mechanism of contraction of muscle fibers. Tiredness physical location: occurs in isolated muscle groups and defined. Usually caused by the lack or insufficiency of localized muscular strength and power imbalance between the muscles agonists and antagonists. The incidence of this type of fatigue must be taken into consideration because the muscles produce factors that, if neglected, will lead to muscle injury. The levels of physical tiredness depend on: the volume of training, the duration of the effort, the intensity of the effort, the length of intervals of effort, the frequency of efforts; of internship training of athletes. The sharp physical tiredness can lead the athlete to a condition of exhaustion, known as physical Overtraining or Strain. This occurs when, produces an athlete in the state of undesirable income. Major causes: very sharp increase in the volume (quantity) and intensity (quality) of efforts; comprehensive technical instruction; excessive application of methods and means of exclusive training, without the same variety; accumulation of training and competitions in a short space of time, not respect to the recovery factors Temporal and super physical.

TYPES TO OVERTRAINING:

In principle, distinguishes itself in the overtraining: a) Overtraining Simpaticotônico: characterized by an increase in physical arousal and a sparkle. This form of physical strain is easy to be perceived as the athlete has a great number of signs and symptoms such as: easy fatigue, excessive excitability, insomnia, loss of appetite, loss of body weight, tendency to excessive sweating, abnormal thermoregulation , Olheiras, tendency to headache, palpitations, paleness, rapid pulse, increased the basal metabolism, body temperature slightly higher, restoring the heart rate slowed to the state of rest after the effort, atypical blood pressure, abnormal hiperpnéia under conditions of stress, sensory hypersensitivity (especially listening), little coordinated development engine, the reaction time shortened, general delayed recovery, increased agitation and anxiety, irritability and depression.

b) Overtraining Parassimpaticotônico: characterized by a preponderance of inhibitory functions of the body weakness and lack of strength. The athlete feels is unable to mobilize the energy needed for training or competition. This form of expression is difficult to diagnose because it shows no disturbance in a position to rest and is beginning its insidious.

CONCLUSION

The occupation of the area of physical activity and / or sport should be attentive to their students, either in the park or in the academies, thereby justifying their work, planning the correct way to the training that these individuals are not obliged to temporarily stop the training, from 2 weeks to 3 months, and possibly even a year. The importance of studying the overtraining is to preserve the career, and especially the physiological integrity of the athletes they are high-level or not. Therefore, control of the methods of implementation of efforts failed when the overload syndrome can develop from various aspects, both physical and psychological. Thus, the overtraining is perceived as an excessive accumulation of stimuli The main objective of the training is the best sports physical performance, however, there is a threshold between optimal training and adjustments to the adjustments of negative overtraining. Currently there is a simple marker that can provide for him, however, a suitable control of the physical performance is still considered the gold standard in detecting the overtraining.

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CAUSES AND CONSEQUENCES OF OVERTRAINING
ABSTRACT

The aim of the sports training is the increase and the improvement of the physical performance. Whenever the intensity, duration and the daily working load are not appropriate, positive physiological adaptations occur. However, there is a fairly subtle delimitation between an outstanding performance and a decrease in it due to overtraining. Overtraining may include: lesion and muscular weakness; cytosine activation; hormonal and hematological alterations; mood swings; psychological depression and nutritional problems which may lead to loss appetite and diarrhea. Several studies about overtraining have been conducted with the effort to identify its causes, symptoms, hypotheses, besides the markers that could identify it. Nevertheless, its diagnosis is very difficult since the overtraining symptoms are similar to the ones from preovertraining and to the ones from normal training, making it difficult to dissociate them.

Key words: Overtraining, Pre-overtraining, health.

LES CAUSES ET LES CONSÉQUENCES DU SURENTRAÎNEMENT
ABSTRACT

L'objectif de la formation sportive est l'augmentation et l'amélioration de la performance physique. Chaque fois que l'intensité, la durée et la charge de travail quotidien ne sont pas appropriés, positifs adaptations physiologiques se produisent. Toutefois, il existe une délimitation assez subtil entre une performance exceptionnelle et une diminution dans ce dû au surentraînement. Surentraînement mai comprennent: lésion musculaire et faiblesse; cytosine activation; hormonaux et des modifications hématologiques, les sautes d'humeur, dépression psychologique et les problèmes nutritionnels qui mai conduire à la perte d'appétit et la diarrhée. Plusieurs études sur le surentraînement ont été menées avec les efforts visant à identifier les causes, les symptômes, les hypothèses, en plus des marqueurs qui pourrait l'identifier. Néanmoins, son diagnostic est très difficile puisque les symptômes du surentraînement sont semblables à ceux de preovertraining et à ceux de la formation normale, ce qui rend difficile de les dissocier.

Mots clés: surentraînement, Pré-surentraînement, de la santé.

CAUSAS Y CONSECUENCIAS DE SOBRENTRENAMIENTO
RESUMEN

El objetivo de la formación deportiva es el aumento y la mejora del rendimiento físico. Cuando la intensidad, la duración y la carga diaria de trabajo no son adecuadas, adaptaciones fisiológicas positivas ocurren. Sin embargo, no hay una delimitación bastante sutil entre una destacada actuación y una disminución en ella debido a sobrentrenamiento. Sobrentrenamiento pueden incluir: lesión muscular y debilidad; citosina activación; hormonales y alteraciones hematológicas; cambios de humor, depresión psicológica y los problemas nutricionales que pueden conducir a la pérdida del apetito y diarrea. Varios estudios acerca de sobrentrenamiento se han llevado a cabo con el esfuerzo de identificar sus causas, síntomas, hipótesis, además de los marcadores que podrían identificarlo. Sin embargo, su diagnóstico es muy difícil desde el sobrentrenamiento síntomas son similares a los de preovertraining y los de formación normal, por lo que es difícil disociar ellos.

Palabras clave: sobrentrenamiento, Pre-sobrentrenamiento, la salud.

CAUSAS E CONSEQÜÊNCIAS DO SOBRETREINAMENTO
RESUMO

O objetivo do treinamento esportivo é o aumento e a melhora do desempenho físico. Quando a intensidade, a duração e a carga de trabalho diário dos exercícios são apropriadas, adaptações fisiológicas positivas ocorrem. Entretanto, existe uma linha muito tênue entre um ótimo desempenho e uma diminuição do mesmo em função do sobretreinamento. O sobretreinamento pode incluir lesão e fraqueza muscular, ativação das citosinas, mudanças hormonais e hematológicas, alterações no humor, depressão psicológica e problemas nutricionais que podem causar diminuição do apetite e diarréia. Muitos estudos sobre o sobretreinamento foram realizados num esforço de identificar suas causas, seus sintomas, hipóteses e marcadores que pudessem identificá-lo, mas este diagnóstico é muito difícil, pois os sintomas do sobretreinamento se confundem com os do pré-sobretreinamento e com os do treinamento normal, sendo que é difícil dissociá-los.

Palavras-chave: Sobretreinamento, Pré-sobretreinamento, saúde.