

ORIGINAL ARTICLE

Seirul-lo Vargas, Fco. (1986). "Entrenamiento Coadyuvante".
Apunts de Medicina Esportiva, 23, 38-41.

Translated and adapted by David Ribera-Nebot

ADJUVANT TRAINING

Francisco Seirul-lo Vargas

Professor of the INEFC (National Institute of Physical Education of Catalonia)
Barcelona University, Spain

Introduction

Both coaches and doctors agree that after an injury an athlete needs, even having conducted a rehabilitation process directed by a doctor, an adaptational workout before his normal integration to the regular training process and even more to an efficient performance in competition.

The present work is an attempt for normalization and organization of these practical needs within some training systems that are able to achieve such goals. Under a unique epigraph, we group different training systems that solve the requirements of an athlete facing an injury, before it occurs, during its treatment and once the treatment is finished.

The extreme demands of the organism of a high performance athlete, specially his locomotion system, force the development, parallel to the training improvement of specific physical and technical capacities, of another training that is able to maintain this athlete in such conditions that permit him the necessary performance of high training loads with the necessary continuity.

This is the "Adjuvant Training" and we define it as follows: that training methods that help medication and fundamentally contribute with the prevention of injuries of the athletes, occasionally participating with the efficacy of post-injury therapy.

Similar to traditional training, in order to attain its objectives it provides adapted or created training systems based on the already-known training systems. A group of these systems are preventive, to be applied previous to injury and cooperating with a support and aid medication for recovery, when exists. While other systems are applied during and after the produced injury, in order to achieve the most quick reintegration into competition from which he was separated. All these groups of systems as well as the methods of temporal application, make up the called adjuvant training that we develop as follows.

Group of Systems Integrating the Adjuvant Training

- A. To be applied before injury.
 - 1. Suppression Training.
 - B. To be applied during injury.
 - 2. Training of Avoidance.
 - 3. Alternative Training.
 - C. To be applied during recovery.
 - 4. Post-Dramatic Training.
 - 5. Peremptory or Final-Resolution Training.
-

1. Suppression Training

It is aimed at preventing, suppressing, any possible injury. Therefore, it is pre-pathological and parallel to the traditional training of capacities improvement. It must cooperate with the helping medication for recovery and prevention, as well as with the other non-pharmacological recovery means that are used, such as massage, sauna, electrical stimulation, cryotherapy, etc. In order to, by doing so, maintain the athlete away from the pre-injury threshold, and make the continuity of his training possible.

The objectives of this system are as follows:

- To continually improve the basic coordination capacities of the corporal areas that preferably participate in the execution of the specific techniques of such sports speciality.
- To achieve the necessary equilibrium of the muscular balance among the most important muscular groups, main-antagonistic, of the preferable techniques by the athlete.
- To cooperate, with the other used methods, on the tendinous-articular unload of every training day.
- To constantly improve the articular mobility.
- To help with the achievement of the desired muscular elasticity.
- To achieve the mechanical understanding of the specific techniques.

2. Training of Avoidance

When the athlete is injured, this training preserves him from the total loss of muscular function in the affected zones. Its application is parallel to the planned medical training, with which it must be coordinated. Cooperation between coach and doctor must be absolute, the possible options to perform should be decided between the two of them.

The objectives of this system are as follows:

- Compensatory muscular hypertrophy, on the not-totally-affected active muscle groups; providing methods of active and controlled contraction in isometric conditions or of other more advisable type.
- Articular activation, avoiding the total loss of kinesthetic stimuli that are brought about by immobility. This situation leads to a momentary disorder of the corporal schema concept which sometimes causes delays in the posterior rehabilitation.
- To maintain the specific motor schemas by selective practices of movement-image training, so as to maintain the previous technical level.

3. Alternative Training

This system tries to maintain the performance conditions and capacities at the maximum possible level. It must provide the required training stimuli to the muscular groups which are not affected by injury and achieve, as much as possible, the continuance of the athlete within the training group and the training activity.

The objectives of this system are as follows:

- To perform the strength training, under sport-specific conditions, of the muscular groups which are not affected by injury. Even, to complete some particular "lacunae" of muscular building that, because a lack of time, were not considered in other training phases.
- To maintain the general physical condition level preferably focusing on the energy production systems.
- To perform the necessary tactical training, based on the specific sport and athlete's speciality, with theoretical problems and video-tapes of tactical situations.
- To practice complementary technical actions that are able to perform in this special situation.

4. Post-Dramatic Training

The athlete has already finished his curative treatment and he has begun his rehabilitation, or other therapy methods proposed by the doctor. This training comes with and reinforces, as much as possible, these actions until the moment of medical discharge. Its purpose is to cooperate with the most quick recovery of lost functions.

The objectives of this system are as follows:

- To collaborate with rehabilitation, under doctor supervision.
- Physiological re-adaptation of the affected zone to the training dynamics, basically to the most used systems for the development of the specific qualities of his sports speciality.
- To provide a planning of the training loads that the athlete is performing, in order to gradually the athlete is able to be integrated within the effort and rest dynamics of the regular training.

5. Preemptory of Final-Resolution Training

The responsibility of this system is to provide the training loads from the instant of medical discharge until the moment in which the athlete achieves a condition level that is similar to the level of members of the training group. Depending on the competitive period, it will be different, but in any case the system must bring him towards a level of possible immediate competition.

The objectives of this system are as follows:

- To achieve the desired level of physical condition, based on his speciality and previous capacities.
- Security in technical execution of a level similar to his previous situation and integration within the usual tactical systems in team sports.
- Confidence with his total recovery for competition.
- Total integration with the training group.

References

-
- CALABRESE, L.: "Gimnástica preventiva". Societá Stampa Sportiva. Roma, 1978.
- CECCALDI, A.: "Práctica de la reeducación del pie". Toray-Masson. Barcelona, 1971.
- COLSON, J.: "Terapéutica por el ejercicio". Jims. Barcelona, 1974.
- ETIENE, J.C.: "Sport et Reeducation". Masson. París, 1980.
- KELLY, E.D.: "Adapted and corrective Physical Education". Ronald Press. New York, 1965.
- KNOT, M.: "Facilitación neuromuscular propioceptiva". Ed. Médica Panamericana. Buenos Aires, 1974.
- KREJCI, V.: "Lesiones musculares et tendineuses du sportif". Masson. París, 1985.
- LICHT, S.: "Terapéutica por el ejercicio". Ed. Salvat. Barcelona, 1970.
- MUELLER, G.V.: "Remedial Physical Education". Lea and Febiger. Philadelphia, 1965.
- RATHBONE, J.: "Corrective Physical Education". 7ª ed. W.B. Saunders Co. Philadelphia, 1965.
- STAFFORD, G.T.: "Preventive and Corrective Physical Education". Barnes and Company. New York, 1934.
- WHEELER, R.H.: "Educación física para la recuperación". Ed. Jims. Barcelona, 1971.
-
-

© 1986 **Francisco Seirul-lo Vargas** *ALL RIGHTS RESERVED*

www.EntrenamientoDeportivo.org



© 2003 educacionmotriz.org
© 2003 motricidadhumana.com