

STRATEGIES TO PREVENT AND TREAT POST - TRAUMATIC LESIONS IN HANDBALL GAME

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Abstract

Purpose: The game of handball is a harmonious combination between natural movements as running, throwing and jumping on the one hand and simple specific movement skills, accessible and attractive on the other hand. Also the game of handball takes place on a background of intense psychical demands, which are highly educational and formative. Obtaining great performance requires from the athlete remarkable physical effort which leads to wear of body with permanent damage to health, especially when the preparation process is guided by empiricism and improvisation rather than scientific principles. The risk of accident is always present in sports activity and is often generated by known causes like exaggerations in graduation of effort, inadequate warm-up or aggressiveness in the play field. Detection and treatment of clinical forms, therapeutic conduct and athlete recovery are just some of the directions that need to be followed in order to obtain sustainable solutions to ensure performance. The main purpose of this research consists in bringing a prospective study of injuries in handball, giving a precise definition of the concept of trauma, following on personal data upon injury mechanisms and examining of these injuries for obtaining accurate information on such mechanisms and for recommending effective prevention methods.

Methods: Accident prevention is possible only if causes that lead to them are known. These causes vary depending on the sport particularities, the environment, the play ground, equipment and installations, gender, pedagogical experience of the teachers etc. The subjects involved in the research were represented by the handball players that were monitored for a long period of time. A special attention must be given both to the body care which is related to recovery training and also to other parameters related to sports performance, throughout the whole competition year. The proposed prevention and conditioning program addresses to strengthening tendons and ligaments, together in the same time with muscles in order to strengthen the joints they cross, to help prevent injuries and to achieve full range of motion and stability. It is also important to increase flexibility and joints range of motion, using static stretching exercises for general flexibility, specific warm-up procedures, power training and resistive exercises according to specific activity.

Results: Recovery is a complex interdisciplinary action involving professional medical and social aspects. According to the research, we observed that the body segment most exposed to trauma is the lower leg, which represents 63% of total disorders. The less affected area in terms of trauma is the trunk, which is 0, 5% of the total. Statistical analysis and processing of survey's data showed that the most requested body segment in terms of traumatic diseases is the knee and the least required are the thorax and the abdomen. Taking into account the nature of the condition, we observed that the most common affection in handball player is represented by the direct trauma, followed by the sprain and then the meniscus injury. Other lesions that are not in proportion as those mentioned above are: pseudoarthrosis and essential osteolysis. In conditions of modern handball practicing that involves total commitment, players are sometimes exposed to injuries. These traumas occur less frequently in training and official games.

Conclusions: According to the records and the medical observed descriptions of handball players, we noticed that there was an analysis or an "examination" of the musculoskeletal system that has to include both the macro and microstructure of musculoskeletal system in order to determine an accurate diagnosis and to achieve a fair and effective therapy. For this achievement it must be established first a certain and detailed medical history, then the group of anatomical formations injured, which must determine the correct location of the lesion, the exact formation injured, either solitary or in combination with other formations localized in the immediate vicinity, superficially or in depth, through inspection and palpation. It is noted that one characteristic of the handball game is that this sport exposes to acute trauma that generates fractures, capsule-ligament injuries, muscle lesions and lesions of the meniscus.

Key words: handball, post – traumatic, lesions, rehabilitation, prevention.

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Purpose

The game of handball is a harmonious combination between natural movements like running, throws and jumping on one hand and specific driving habits simple, accessible and attractive addition. Also handball game takes place against a background of

intense physical demands, which are highly educational and formatives. (Mihăilă, I., 2006).

Getting great performance from the athlete requires great physical effort which may lead to wear body with irreversible damage to health, especially when the preparation process, rather than being driven

by scientific principles, is guided by empiricism and improvisation.

Recovery action is a complex interdisciplinary issues involving social and medical professional. Recovery period has a precise meaning in Romanian. Thus, to recover is to restore again to recover all or part of materials, substances, power, function, etc.. This definition encompasses both the recovery action to recover and result of this activity. (Drăgan I., 2002)

The risk of accident is always present in sport is often generated by known causes, including the determination exaggerations effort, insufficient heating, aggression in the playground (Dumitru, Gh. 1994). Detection and treatment of clinical forms, therapeutic conduct and athlete recovery are just some of the directions to be followed in order to find viable solutions to ensure performance (Georgescu L. 2006).

Virtually all musculoskeletal injuries can be prevented through proper training initiated and led by an appropriate physical training. So the logical conclusion to be drawn is that training should be reconsidered in terms of injury prevention (Kreider, R., 1998).

In the spirit of this idea we designed the present development work taking into account the following factors:

- ✓ increased incidence of handball injuries during performance;
- ✓ incomplete knowledge of the particular anatomical and biomechanical aspects of the structures involved in sports injuries;
- ✓ crucial role of medical control in physical education and sport activities, the role of prophylaxis in preventing illnesses and injuries occur;
- ✓ kinetherapist role relatively recent practice in the sport.

Methods

Most injuries indicate a close interdependence between the number and kind of sports injuries and characteristics of each sport. Type of effort, biomechanical characteristics, specific discipline rules, equipment and apparatus used, environmental and organizational conditions are among the many causes which are to vary not only percentage but also the way sports injuries and their location. In terms of injuries 2 ranked handball Olympic sports.

Handball involves actions performed with great speed, strength, precision driving which requires players individual and collective reactions adequate to properly resolve situations that arise during the game required the rapid passage of the defense review, the dispute with the opponent. For the performance of game players are required great expansion response speed, strength, specific technical very fine sense of direction and running in minimum time, as the best choice phase.

The game of handball is also characterized by the appearance during the specific effort of often violent contact with the ball field, but especially with the opponent. Hence the need to train both the lower and the higher the player is well developed joints and

musculo-tendinous structures flexible and mobile to achieve the technical maneuvers of precision and finesse. Disorders frequently encountered in handball players are scapulohumeral luxation, contusions, sprain of the elbow, fingers hand, knee sprain, sprain of ankle, meniscus lesions, low back pain,. From studies showed that the highest rate of injuries associated with throwing action followed by blocking the gate, requiring both the jumping athlete.

Accident prevention is possible only if it determines the causes are known, they vary depending on the particular sport, the environment, playing, equipment and installations, sex, teacher pedagogical skill, etc.. We found a direct correlation between the frequency and nature of accidents on the one hand and training methods on the other hand. This led to the conclusion that the emergence of a series of changes in the methods of training, adding that the process of training methods for joint exercise, massage, stretching, exercises to increase muscle strength, would substantially reduce the strain injury cases.

Subjects of the research we were represented by handball players have been monitored for a long time. Particular attention must be given body care related training both recovery and other parameters related to sport performance, competitive throughout the year. The proposed program addresses prevention and conditionings strengthen tendons and ligaments, while the muscle to strengthen it through the joints to prevent injuries and to achieve the full range of motion and stability. We also increased flexibility and range of motion of joints, we used the static stretching exercises for flexibility in general, specific procedures for heating, power training, and resistive exercises based on specific activity.

Results

Medical Investigation - sports specific effort, called medical observation - teacher, presents a practical and effective form of medical control - biological sports training, designed to contribute to the prevention of illnesses induced or promoted any sporting effort but also to assess any Since exercise capacity and therefore specific medical premises - Sports biological efficiency. Training serves to keep the highs of those variants that affect performance in different sports. Training time to reach the maximum reached, so that has made the search for higher quality training facilities.

Caused by sports injuries occur more frequently than generally considered. Thus, recovery training is individual training, dosed load (cargo) after injury. Dosage pregnancy increases the health status and exercise capacity days, in conjunction with the methods of activity and movement for each type of sport in hand. Recovery Training deals not only injured segment but the complex forms of training, the whole body.

Athlete responsibility is another facade of prevention. This means that he must really live sports (rest and nutrition).

Recovery action is a complex interdisciplinary issues involving social and medical professional.

According to the research, I noticed that: the body most exposed to trauma is the lower limb, which represents 63% of all diseases, and most spam in terms of trauma is the torso, which is 0, 5% of the total. Analysis and statistical processing of survey data showed that the most requested body segment in terms of knee disorders is trauma and the least addressed is the thorax and abdomen. After the nature of disease, we observed that: the most common disease in handball player is direct trauma, sprain and then follows the meniscus injury and those who are not in proportion as those mentioned above are pseudarthrosis and essential osteolysis. With total commitment to engaging with modern handball players are often exposed to injury. They rarely occur more frequently in training and official games.

From the foregoing that lately more and more authors recognize that the primary cause of injuries sports and fitness athletes inappropriate.

Of data analysis research note that the body is most exposed to the lower limb injuries, which represent 63% of all diseases, and the inertia in terms of trauma is the torso, which is 0.5% of the total. Most requested body segment in terms of knee disorders is trauma and the least required is thorax and abdomen. Disease most common in handball player is trauma, sprain and then follows the meniscus injury and those who are not in proportion as those mentioned above are pseudarthrosis and essential osteolysis. With total commitment to engaging with modern handball players are often exposed to injury. They rarely occur more frequently in training and official games. It is noted that the practice of handball injuries occur more frequently than generally considered.

According to the descriptions found in medical records of handball players have noticed that there was an analysis or an "examination" of the locomotor's system must know both the macro and micro locomotor's to establish a real diagnosis for achieve a fair and effective therapy. For this achievement must be established first accurate and detailed history, and anatomical formation or group of aggrieved parties, who must determine the correct location of the lesion, formation affected either solitary or in combination with other formations in the immediate vicinity, the area in depth or associated with inspection and palpation.

Discussion and conclusion

Handball game belongs to the category of team sports, is a spectacular game based on the craftsmanship is recovered within the physical, technical and mental fitness of players, held within a simple and accessible regulation, well established.

It is essential that those who prepare today's handball players know the best method for exploring the whole exercise capacity, so that the interpretation of results showing the attitude and methodology of sports training in line with objectives set out for the team.

Of trauma, the most common musculoskeletal injury caused by the practice of handball game is

sprain, including the knee, ankle, the elbow joint and hand, wrist, thumb.

If handball player injured, an important role in further sporting activities occupy recovery and rebuilding.

Recovery training can be used as a means of prevention. Accidents can be prevented through systematic training. It is important to pay attention to workout recovery led to a clear purpose and effort and intensity of training, depending on age.

In general (depending on the seriousness and urgency of surgery), recovery is performed in periods of transition. But regardless of the period when required to recover a player must associate medical facilities and hygienic with mental recovery. Any accident you yank the team player that is connected, which prohibits an effort beyond measure, and especially participation in official games, has in most cases a psychic echo of frustration, marginalization, deterrence, uncertainty of total recovery.

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