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Physical rehabilitation under injury to the capsular ligamentous apparatus of the knee joint

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This study is dedicated to physical rehabilitation of soccer players with injury to the capsular ligamentous apparatus of the knee joint, namely, anterior cruciate ligament, aimed at the recovery of motor function of the injured lower limb. The results of the data analysis of many studies allow to draw a conclusion that soccer is one of the most high-injury rate sports. According to the studies in Europe, 50-60% of all sports traumas, as well as 3, 5-10% of all injuries of the locomotor system, requiring hospital treatment are due to soccer, more than 70% of which accrue to injuries of the lower limbs. Injuries to the capsular ligamentous apparatus of the knee of soccer players constitute 10-24% of all the traumas of the lower limbs and are classified as the most severe injuries to the joints, essentially impairing its motor function. According to domestic and foreign researchers 47% of injuries to the capsular ligamentous structures of the knee joint accrue to anterior cruciate ligament. In this research on the basis of examination of the functional state peculiarities of the players' locomotor system physical rehabilitation program aimed at the recovery of motor function of the damaged lower limb with injury to the capsular ligamentous apparatus of the knee joint, particularly anterior cruciate ligament after arthroscopic reconstruction has been substantiated and developed. This program includes the application of therapeutic exercises, passive mechanotherapy, hydrokinesitherapy, proprioceptive and functional training by specialized periods. In particular, the technique of application of the special physical exercises while functional and proprioceptive training, aimed at improvement of inter muscular coordination, intra-articular sensitivity of the injured knee joint and recovery of special performance efficiency has been developed. Data on positive influence of the proposed means and methods of physical rehabilitation, included in the program for recovery of motor function of the injured lower limb of soccer players after arthroscopic reconstruction of the anterior cruciate ligament, have also been confirmed. The developed program is built taking into account the necessity to return athletes to full training and competition activity.

Biography

V V Stelmashchuk is currently a second year PhD student from University of Physical Education and Sport of Ukraine at the same time he is working as a coach instructor of the Educational and Health Centre (Olympic Style) of the National University of Physical Education and Sport of Ukraine and carrying out research on physical rehabilitation of Soccer Players with injury of the locomotor system. His present research entitled 'Physical Rehabilitation under Injury to the Capsular Ligamentous Apparatus of the Knee Joint' abstract of which is currently being reviewed by the conference committee.

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