

EARLY REHABILITATION USING REFLEXOTHERAPY METHOD FOR ANKLE INJURIES

Ravshanova Maftuna Zokhidzhonovna

Samarkand State Medical University

Rustamova Nazira Babakulovna

Research Institute of Rehabilitation and Sports Medicine

Target. Evaluation of the effectiveness of the method of acupuncture (ART) for injuries to the knee and ankle joints in athletes as a result of injuries.

Methods. The study involved 44 athletes involved in various sports who had traumatic injuries to the knee/ankle joints. The main group included 44 athletes, whose comprehensive rehabilitation program included RTI. The control group consisted of 15 athletes whose rehabilitation program was carried out without the inclusion of RTI.

Results. The analysis showed that after 1 course of treatment, 85% of patients in the main group showed a persistent improvement in their general condition, as well as a decrease in pain (follow-up for at least 6 months), in comparison with the control group, without IRT, in which improvement was noted only in 70%. In addition to assessing the effectiveness of acupuncture in the treatment of pain in arthrosis of the knee joint and joint joint, the reaction to the effect after each procedure was studied. When using the inhibitory method of IRT, a significant reduction in pain was determined in 90% of patients immediately after the procedure, compared with the control (without IRT), in 75%

Conclusions. The inclusion of IRT in a complex of rehabilitation treatment regimens for athletes with injuries of the knee joint and joint joint makes it possible to achieve rapid and effective recovery, which could be observed in the dynamics and outcome of joint injuries.

Keywords: acupuncture, traumatic injuries of the knee and ankle joints, sports injuries, rehabilitation in sports.

Sports traumatology is a science that studies the prevention of injuries during sports, as well as the search for therapeutic methods and rehabilitation. Sports injuries occupy one of the last places among all injuries [3,4,8]. But, it is necessary to take into account the fact that they can be both light and heavy, which are reflected in the general and special performance of the athlete, putting him out of action, sometimes for a long time. This leads to further protracted treatment, which is aimed primarily at restoring the lost functions and performance of the athlete [3,6,7,8]. Therefore, one of the global tasks of all specialists working in the field of protecting the health of athletes is to know the main causes of injuries and be able to prevent them in a timely manner.

In modern orthopedics and traumatology, as the concept of integrative medicine develops and is introduced into practice, the range of indications for surgical treatment of injuries and orthopedic deformities is significantly expanding. Given the high level of operational activity, the issues of patient rehabilitation naturally become of greater relevance.

The high demands placed on the musculoskeletal system (MSA) by athletes during sports training and competitions necessitate the complete restoration of the functions of the damaged area and the body as a whole. It is also necessary to take into account previously received injuries and injuries that cause the development of chronic processes, which under certain conditions (usually with repeated injury) can cause exacerbation and be accompanied by impaired performance of the athlete with serious damage to both the joints and the muscular-ligamentous component.

Currently, it is customary to begin a complex of therapy in the early postoperative period - from the first day (hours) during surgical intervention. Limitation of the early start of rehabilitation measures may be due to the presence of pain, swelling in the area of the postoperative wound, the presence of sutures, drainages, external fixation devices, which contribute to the delay of active rehabilitation treatment. One of the alternative and effective treatment methods currently is acupuncture (ART), which has an indirect effect on the pathological focus.

The study of individual aspects of reflex action contributed to the identification of several theories of the mechanism of action of reflexology (RT).

One of the well-known ones is: 1. the theory of tissue therapy - in which the main factors of the therapeutic effect are considered to be biochemical substances that are formed when a biologically active point (BAP) is traumatized by a needle (hormones, protein breakdown products, etc.). 2. theory of normalization of capillary blood flow; 3. histamine equalization theory; 4. chemical-humoral-neural theory - in it the leading place is given to the action of prostaglandins, which are released during a needle prick; 5. electrical theory - the onset of the therapeutic effect is associated with the action of microbiocurrents, which also arise when a needle is inserted; 6. bioelectric information-energy theory - it is based on the interaction of the bio- and magnetic fields of the earth and humans, their complementarities in the energy meridians of the BAP, that is, the relationship at all levels of living systems from the cell to the biosphere; 7. psychotherapeutic theory - in it the main role is given to psychotherapeutic effects during RT; 8. reflex theory - in it the mechanism of action is explained by reflex processes of the neuro-immuno-endocrine system, which are triggered by exposure to BAP [1,2,10].

Thus, RT (Latin Reflexus - turned back, reflected + Greek therapeia - treatment), from the point of view of modern researchers, is a healing system that is based on reflex relationships formed in the process of phylo- and ontogenesis, the main mechanisms of which are realized through nervous system (NS), as a result of irritation of the receptor apparatus of the skin, mucous membranes and underlying tissues (BAT), with a subsequent effect on the functional systems of the body. The main effect of RT is realized by stimulating sanogenesis - a dynamic complex of protective and self-regulatory adaptive mechanisms (physiological/pathophysiological in nature), which arise under the influence of extreme stimuli that develop throughout the entire process from pre-illness to recovery, aimed at restoring impaired self-regulation of the body [1,3].

Materials and methods. This material presents data on the use of IRT among patients, athletes of various sports, with injuries to the knee (KS) and ankle joints (AJ), who in the postoperative period underwent recovery and rehabilitation treatment at the Research Institute of Rehabilitation and Sports Medicine at the Samarkand State Medical University.

The study included athletes (n=44), with injuries to the knee joint (n=34), the joint joint (n=10), average age 25.3 ± 2.2 years, hospitalized for rehabilitation treatment, of which n=30 were men (68.2%); women - n=14 (31.8%).

The studies were carried out during different periods of observation of patients: during the period of initial treatment, 10 days after the operations. Patients underwent general clinical examinations and examination by specialists in physiotherapy and acupuncture, with determination of prescriptions and indications for RT. From the 2nd day onwards, the general prescribed treatment additionally included exercise therapy,

isometric, breathing, restorative gymnastics, and ideomotor exercises. In addition to RTI, all patients underwent courses of physiotherapeutic treatment - magnetic therapy, phonophoresis [3,6,7].

IRT courses, according to acupuncture techniques, were carried out daily in inpatient treatment, and every other day in outpatient treatment. The total number of sessions per course was 10-12, duration was 40 to 60 minutes.

Acupuncture is a type of RT. By irritating with a needle the skin-nerve, muscle-tendon-nerve, neurovascular receptors of certain BAPs of the human body, one can obtain local segmental-organ responses that have a positive effect, reducing the risk of complications during the restorative treatment of arthropathy.

RT was carried out using the classical method using a three-zone action selection system in BAT according to D.M. Tabeeva. Needles were inserted into corporal BAPs using inhibitory and excitatory methods of influence. The selection of BAP was made individually, the number of points was minimal to 6, avoiding repeated exposure to the same point to prevent adaptation [2,9,10].

Painful points in the area of the knee joint and joint were examined by palpation, followed by insertion of needles with slow rotational movements into the soft tissues until the following sensations were obtained: numbness, aching, distension, and mild tingling.

Patients admitted for rehabilitation had previously undergone surgical treatment in the department of traumatology and orthopedics, with various surgical interventions. At the same time, isolated meniscus injuries were diagnosed in 10 patients, relatively recent injuries - in 34 patients, injuries to the medial meniscus in 32 patients, lateral meniscus - 10, both menisci - in 2. All patients underwent arthroscopic revision of the knee joint. In case of damage to the bursa-ligamentary apparatus, restoration was carried out using previously known methods. In the postoperative period, passive movements with an amplitude of 180-900 C were allowed the next day, axial load - after 2 days.

Results and its discussion

The disease in patients of the study group was manifested by pain in the knee joints, limited range of motion, decreased support of the diseased limb, and the pain had different localization.

Classical acupuncture techniques were used to treat pain in the knee joint (KJ). The treatment result was good in 31 patients, satisfactory in 10, unsatisfactory in 3. According to our observations, patients receiving IRT noted an improvement in well-being, a decrease in the amount or complete elimination of painkillers, subjective relief in the tolerance of surgical trauma, early activation and normalization of physiological functions, with the restoration of muscle tone and range of motion in the joints.

After 1 course of treatment, 85% of patients in the main group showed a persistent improvement in their general condition, as well as a decrease in pain (follow-up for at least 6 months), compared to the control group without IRT, in which improvement was noted in 70%. In addition to assessing the effectiveness of acupuncture in the treatment of pain in arthrosis of the knee joint and joint joint, the reaction to the effect after each procedure was studied.

When using the inhibitory method of IRT, in 90% of patients immediately after the procedure, a significant reduction in pain was determined, compared with the control (without IRT), in 75%, respectively, but an exacerbation was characteristic, which lasted up to 4 days with a peak on the first day after it. At the same time, in the comparison group there were no exacerbations, and the pain syndrome persisted much longer, more than 10 days. After the exacerbation subsided, the severity of pain was assessed as pain of a less intense nature than before the procedure. When choosing points located remotely from the zone of severe pain, such exacerbations were not observed. At the same time, a decrease in pain was observed in 67% of patients, in the comparison group only in 35%. With the combined use of local and remote points, exacerbation on the first day after the procedure

was observed in 14% of patients, while 86% experienced a decrease in pain on the 4th day after the session.

Thus, in conclusion, we can make recommendations that in the treatment of traumatic lesions of the knee joint and joint joint in athletes, the optimal combination of local and remote BAPs is optimal, because this ensures and contributes to reducing the frequency of exacerbations and increasing the effectiveness of the IRT procedure, in comparison with the group without IRT.

Indications for prescribing IRT in the postoperative period are divided into direct and relative [1,2,3]. Direct ones are: pain syndrome, functional disorders; relative - paresis of the intestines, bladder, reflex urinary retention, nausea, vomiting, swelling of the limb, superficial phlebitis, hypercoagulability syndrome, concomitant diseases in the acute stage. Contraindications to RTI are: malignant tumors, pregnancy, diseases of internal organs in the stage of decompensation, fever of unknown origin, purulent complications, negative attitude of the patient towards the procedure [2,10]. One of the positive and distinctive features of RTI is the absence of addiction, side effects (with proper use and choice of points of influence), individualization of treatment taking into account the main and accompanying symptoms, syndromes, as well as the possibility of its use in allergic reactions to medications [9,10].

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