Effectiveness of the electromyostimulation in prevention of venous thromboembolism and its impaction on the quality of rehabilitation of patients with tibial fractures

Prophylaxis of venous thromboembolism (VT) during the rehabilitation of patients with fractures of lower extremities is one of the most pressing issues in traumatology. Electromyostimulation (EMS) is one of the prevention methods of VT. In the literature, there are not enough data proving the high efficiency of the method in this group of patients. Reportedly, EMC improves venous outflow and inflow thereby increasing arterial blood perfusion of the affected limb. This technology allows us to reduce the peripheral edema in the short terms and thereby to reduce the time of preparation for osteosynthesis. Continuous muscle work during immobilization prevents the development of atrophy and thus reduces the time of rehabilitation. We analyzed the results of treatment 60 patients with tibial fractures (long bone 4 according to AO/ASIF classification) aged 28 to 64 years from 2013 to 2014. After all diagnostic and treatment procedures under the accepted protocol the patients were randomly divided into 2 groups. The rehabilitation of patients of the first group was performed using EMS. Patients of the control group were rehabilitated without using this method. The obtained results have proved that EMS is a highly effective method in prevention of VT and thereby it reduces the time of hospital stay and rehabilitation of these patients.

Biography

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