RECOVERY OF SPINAL WALKING IN PARAPLEGIC DOGS USING PHYSIOTHERAPY AND SUPPORTIVE DEVICES TO MAINTAIN THE STANDING POSITION

Henea Mădălina Elena, Şindilar Eusebiu Viorel, Burtan Liviu Cătălin, Mihai Iuliana, Grecu Mariana, Anton Alina, Solcan Gheorghe

"Ion Ionescu de la Brad" University of Life Sciences, Iasi, Romania E-mail: gsolcan@uaiasi.ro

Paraplegic patients have always been ideal candidates for physiotherapy due to their body's inability to recover on its own. Regardless of the cause that led to the onset of paraplegia (traumatic or degenerative), physiotherapy helps these patients with devices and methods designed to restore the proper functioning of their motility, as well as their quality of life.

A total of 60 paraplegic dogs without deep pain in the hindlimbs caused by discal hernia or thoraco-lumbar fractures underwent physiotherapy sessions: manual therapy (massage), electrostimulation (10–20 minutes with possible repetition on the same day), ultrasound therapy, laser therapy, hydrotherapy, and assisted gait in supportive devices or on treadmills to stimulate and relearn walking, which was the main focus of the study.

To maintain the standing position over time, we developed different devices adapted for each patient, depending on the degree of damage and the possible associated pathologies. Concurrent pathologies (skin wounds, urinary infections, etc.) were managed concomitantly.

After 125 to 320 physiotherapy sessions, 35 dogs (58.33%) developed spinal walking and were able to walk without falling or falling only sometimes in the case of a quick look with a lack of coordination between the thoracic and pelvic limbs or difficulties in turning, especially when changing direction, but with recovery of the quadrupedal position in less than 30 seconds.

Keywords: dog, paraplegia, physiotherapy, recovery of spinal walking, spinal cord injury.