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Effectiveness of POLD method in the treatment of acute lumbar disc hernia: A new manual therapy approach

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The effectiveness of manual therapy in the conservative treatment of lumbar disc hernia (LDH) is known, the Pold method uses an innovative way of treatment based on resonant oscillations in the spine, carried out manually. Twenty years of experience treating acute and chronic disc herniation patients, have led to the realization of a comparative clinical study that we will show to you. In view of the results obtained in this trial we conclude that for LDH pathology it is evident that treatment with POLD technique, characterized by a maintained resonant oscillatory mobilization is more effective in increasing range of lumbar flexion, reducing the subjective severity of pain and causing a rapid centralization when compared with standard physiotherapy treatment recommended by current evidence. Our findings suggest that clinicians should consider the POLD method for the treatment of acute LDH in their clinical decision-making. In this presentation we will show you the results of the investigation as well as some images from the application of the technique in these cases.

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Research line: The role of cerebral leukocyte-endothelial interactions in neuroinflammatory and neurodegenerative condition

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Over the past 14 years, I have developed research projects whose focus is the study of the role of leukocyte-endothelial interactions in different neuroinflammatory and neurodegenerative conditions such as experimental autoimmune encephalomyelitis (EAE), the experimental model of Multiple Sclerosis. In order to characterize the dynamics of leukocyte recruitment in the central nervous system in vivo, we used a precious tool, the intravital microscopy, which allows the online visualization of leukocyte trafficking steps, known as leukocyte rolling and adhesion, in the microcirculation. These steps are essential for the transmigration of cells and molecules associated with the immune response, which may interact with central nervous system cells (neurons, microglia, oligodendrocytes, astrocytes), causing their activation and sometimes death or neuro degeneration. Our recently published paper, evaluate the interactions between the regular program of prior exercise and the development of experimental autoimmune encephalomyelitis (EAE) -mediated responses. In summary, we demonstrate attenuated clinical score, an increase of neurotrophic factor (BDNF in brain and spinal cord, with a tendency of lesser demyelization volume in the spinal cord of the EAE exercised group compared with the unexercised animals.

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