

## Spinal kinematics and pain-related fear in chronic low back pain: a cohort study.

Chronic low back pain (CLBP) is one of the most frequent causes for limitations in daily, leisure and work-related activities. Alterations in spinal kinematics have consistently been reported in patients with CLBP, suggesting that this factor could contribute to the chronicity of pain and disability. Psychological factors, such as pain-related fear, have been described as a possible main cause of kinematic alterations in CLBP. While it is known that pain-related fear can drastically decrease during a rehabilitation program, it is not known to which degree it influences spinal kinematics.

Therefore, this study will test patients with CLBP before and after a 3-weeks multimodal rehabilitation program to investigate if a decrease in pain-related fear is associated with spinal kinematics improvements.

This study will advance our understanding of the relationships between psychological and physical factors in CLBP physiopathology. Ultimately, a better comprehension of the underlying mechanisms involved in CLBP rehabilitation will help enhance care for patients suffering from back pain.

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