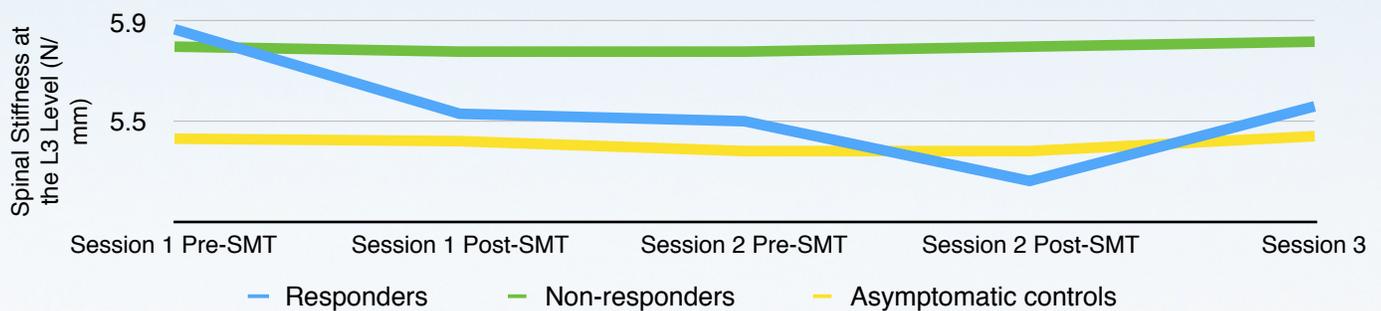


Do Participants With Low Back Pain Who Respond to Spinal Manipulative Therapy Differ Biomechanically From Nonresponders, Untreated Controls or Asymptomatic Controls?

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Mean L3 Spinal Stiffness in Asymptomatic Controls and Responder/Nonresponder Groups



Spinal manipulative therapy, a hallmark of chiropractic care, is a common treatment for low back pain. Research has continued to showcase the efficacy and safety of chiropractic care; however, little has been understood about those who do not respond to spinal manipulation.

This study aimed to determine whether patients who responded favorably to spinal manipulation differed biomechanically from nonresponders. They found that responders had an immediate, and sustained, decrease in spinal stiffness. Additionally, they had an increase in their multifidus thickness ratio. The multifidus is a key stabilizing muscle of the spine.

This study has important clinical implications. By decreasing stiffness and increasing multifidus thickness; spinal manipulation may be beneficial prior to active care, where then the clinical advantages of SMT could lead to improved outcomes.

“After the first SMT, SMT responders displayed statistically significant decreases in spinal stiffness and increases in multifidus thickness ratio sustained for more than 7 days; these findings were not observed in other groups.”

“Responders to spinal manipulative therapy for low back pain are characterized by an immediate and sustainable decrease in spinal stiffness and an increase in lumbar multifidus muscle thickness ratio.”

“In other words, the biomechanical changes in SMT responders were clinically relevant.”

We believe in creating a healthier community. We believe patients have better outcomes when physicians work together. Let's build a healthier tomorrow.