

An investigation into the effects of applying a lumbar Maitland mobilisation at different frequencies on sympathetic nervous system activity levels in the lower limb

Piekarz, V. and Perry, J., 2016. An investigation into the effects of applying a lumbar Maitland mobilisation at different frequencies on sympathetic nervous system activity levels in the lower limb. *Manual therapy*, 23, pp.83-89.

Setting the scene:

In this RCT study they aim to investigate the effects of applying a **lumbar Maitland mobilisation** at different frequencies on **sympathetic nervous system activity levels in the lower limb**

What did they do?

60 healthy male volunteers were randomly allocated into groups; a control group (no contact), placebo group (**sustained static pressure to L4 vertebra**), and 2 intervention groups receiving a **centrally applied postero-anterior mobilisation** applied at **either 2 Hz or 3 Hz for three 1- min periods**. The outcome measure was continuous skin conductance (SC) activity levels in the feet using a Biopac MP35 electrodermal amplifier.

These results suggest that **high frequency mobilisations (3 Hz)** may **stimulate a greater SNS response**.

Takeaway message:

These findings provide preliminary evidence to support the use of 3 Hz oscillatory mobilisations to affect a greater magnitude of SNS activity.

Food for thoughts:

Manual therapy interventions can have on the cascade of SNS responses following mechanical stimulation.