

The immediate effects of sigmoid colon manipulation on pressure pain thresholds in the lumbar spine

Randomized Controlled Trial

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Abstract

Visceral manual therapy is increasingly used by UK osteopaths and manual therapists, but there is a paucity of research investigating its underlying mechanisms, and in particular in relation to hypoalgesia. The aim of this study was to investigate the immediate effects of osteopathic visceral mobilisation on pressure pain thresholds. A single-blinded, randomised, within subjects, repeated measures design was conducted on 15 asymptomatic subjects. Pressure pain thresholds were measured at the L1 paraspinal musculature and 1st dorsal interosseus before and after osteopathic visceral mobilisation of the sigmoid colon. The results demonstrated a statistically significant improvement in pressure pain thresholds immediately after the intervention ($P < 0.001$). This effect was not observed to be systemic, affecting only the L1 paraspinal musculature. This novel study provides new experimental evidence that visceral manual therapy can produce immediate hypoalgesia in somatic structures segmentally related to the organ being mobilised, in asymptomatic subjects.

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