

THE ACUTE EFFECT OF BOWEN THERAPY IN PRESSURE PAIN THRESHOLD AND POSTURAL SWAY IN HEALTHY SUBJECTS

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BACKGROUND: Fascia is connective tissue innervated by free nerve endings and by mechanoreceptors, which have an important role in pain and proprioception. It is believed that Bowen Therapy stimulates the free nerve endings and the mechanoreceptors within the fascia. However, it is unclear whether there is an immediate effect of Bowen therapy on postural control and pain. The purpose is to determine the immediate effect of Bowen Therapy in pressure pain threshold and postural sway of healthy individuals.

METHODS: This is a crossover, randomized, and double blinded study. An a priori sample size calculation determined that 34 participants were needed. Each participant attended two sessions and received Bowen Therapy and a sham procedure. A total of 17 participants received Bowen in the first session and the other 17 participants received Bowen in the second session. The order in which Bowen or the sham procedure were administered was randomized. All participants had their postural control and pressure pain thresholds assessed in sessions 1 and 2 both at baseline and at the end of the session. Postural control was assessed using a force plate and data analyzed for antero-posterior and medio-lateral displacement, velocity and area. Pressure pain threshold was measured at 10 different points on the paraspinal muscles from C1 to S1 using an electronic algometer.

RESULTS: The sample consisted of 34 participants, mean age was 22,0 (\pm 2,2) years old and 18 were females. The results showed a significant difference between groups for the antero-posterior displacement ($p=0,04$) and velocity of the center of pressure ($p=0,01$) and for pressure pain threshold when measured in C1 bilaterally (left: $p=0,02$; right: $p=0,04$). No other significant differences were found.

CONCLUSION: The significant difference between Bowen Therapy and placebo for only 4 of 14 variables suggests that the former has negligible immediate effect on postural control and pain threshold in healthy subjects. These results are consistent with previous research on the immediate effects of manual therapy in healthy individuals.