EFFECTS OF MASSAGE THERAPY ON TENSION-TYPE HEADACHE: A PLACEBO CONTROLLED TRIAL

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Objective. Although massage therapy is a popular treatment for headaches, there is little controlled research on the effectiveness of massage. We evaluated the effectiveness of massage therapy relative to placebo massage for the treatment of frequent tension-type headaches.

Background. The manual manipulation of muscles has been hypothesized to be the active ingredient of massage (Field, 2000)\(^1\).

Methods. Subjects were 53 female college students who meet the IHS criteria for frequent or chronic tension-type headaches. At baseline, all Ss recorded 3-weeks of headache activity (HA) and were assessed for pericranial muscle tenderness (PMT). Pericranial muscle tenderness was assessed via the use of a fingertip palpometer. Five bilateral pairs of pericranial muscles were palpated using fingertip pressure of 500g/cm. Ss were randomly assigned to one of three groups. Two groups received six sessions of massage over three weeks, while the third group served as a no-treatment control group (C). The two massage therapy groups differed in terms of the pressure that was applied during the massage. One group received medium pressure massage therapy (MM) that involved kneading of the muscles; the second group received placebo massage (PM) that with light touch to the skin. Following the treatment phase, Ss continued recording HA and PMT was assessed at the completion of the final treatment and at three-week and three-month follow-up.

Results. A significant interaction between treatment group by time was observed at the three-week follow-up (p<.05). HA decreased over time in the MM group as compared to the C group at the three-week follow-up (p<.05) and the three-month follow-up (p<.05). A significant difference between the groups was also observed at the PMT assessment following treatment (p <.01). Paired analysis revealed that following massage therapy (MM or PM); Ss had lower PMT values than the C group (M\(_{MM}\)=22.10; M\(_{PM}\)=22.00; M\(_C\)=36.64).

Conclusion. Massage therapy produced small but significant reductions in headache activity and PMT levels, but the placebo and "true" massage did not differ in effectiveness.