Can myofascial techniques modify immunological parameters?

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Abstract

OBJECTIVES: The objective was to determine the effect of myofascial techniques on the modulation of immunological variables.

DESIGN: Thirty-nine healthy male volunteers were randomly assigned to an experimental or control group.

INTERVENTIONS: The experimental group underwent three manual therapy modalities: suboccipital muscle release, so-called fourth intracranial ventricle compression, and deep cervical fascia release. The control group remained in a resting position for the same time period under the same environmental conditions.

OUTCOME MEASURES: Changes in counts of CD3, CD4, CD8, CD19, and natural killer (NK) cells (as immunological markers) between baseline and 20 minutes post-intervention.

RESULTS: Repeated-measures ANOVA revealed a significant time × groups interaction (F(1.35)=9.33; p=0.004) for CD19. There were no significant time × group interaction effects on CD3, CD4, CD8, or NK cell counts. Intracohort analyses showed a higher CD19 count in the experimental group post-intervention versus baseline (t=-4.02; p=0.001), with no changes in the control group (t=0.526; p=0.608).

CONCLUSION: A major immunological modulation, with an increased B lymphocyte count, was observed at 20 minutes after the application of cranio cervical myofascial induction techniques.

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