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## Osteopathic manipulative treatment (OMT) effects on mandibular kinetics: kinesiographic study.

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**AIM:** The aim of this study was to evaluate the effects of Osteopathic Manipulative Treatment (OMT) on mandibular kinematics in TMD patients. **METHODS:** The study was conducted on 28 children with non-specific TMD symptoms, limited mouth opening, history of trauma (delivery trauma, accident trauma). Patients were randomly divided into two groups: an OMT group (study group) and a no-intervention group (control group). All subjects underwent a first kinesiographic recording to evaluate the amplitude and velocity of maximal opening-closing movements. Study group patients underwent a second kinesiographic recording 2 months after OMT. Control group patients were submitted to a control kinesiographic recording six months after the first one. Kinesiographic tracings were acquired using the K71 system. **RESULTS/STATISTICS:** The kinesiographic data of the study group showed a moderate statistically significant difference ( $p < .07$ ) of maximal mouth opening (MO) parameter and a high statistically significant difference ( $p < .03$ ) of maximal mouth opening velocity (MOV) parameter. No statistically significant difference (null hypothesis confirmed) of kinesiographic parameters in the control group was observed. **CONCLUSION:** The results of this study suggest that OMT can induce changes in the stomatognathic dynamics, offering a valid support in the clinical approach to TMD. Multifactorial genesis of chronic disorders is also confirmed.

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