Abstract

Background: Migraine and temporomandibular disorders (TMDs) are reported to be associated. However, there are no reports on the association among migraines, TMDs and changes in body posture. Objectives: To assess changes in body posture in women suffering migraines with or without TMD compared with a control group. Method: Sixty-six women with a mean age of 18 to 45 years participated in this study. The groups were composed of 22 volunteers with migraine and TMD (MTMD), 22 volunteers with migraines without TMD (MG) and 22 women in the control group (CG). Static posture was assessed by photogrammetry, and 19 angles were measured. Results: Postural asymmetry was observed in the face for 4 angles measured on the frontal plane in the MG group and for 4 angles of the trunk in the MG and MTMD groups with respect to CG. However, for comparisons between MTMD and CG, clinical relevance was identified for two angles of the sagittal plane (Cervical and Lumbar Lordosis, Effect Size – ES – moderate: 0.53 and 0.60). For comparisons between the MG and CG, the clinical relevance/potential was verified for three angles with moderate ES (ES>0.42). The clinical relevance when comparing MTMD and CG was identified for four angles of facial symmetry head inclination (ES>0.54) and for two angles between MG and CG (ES>0.48). Conclusion: The results demonstrated the presence of postural changes compared with a control group in women with migraines with or without TMD, and there were similar clinically relevant postural changes among the patients with migraines with and without TMD.

Keywords

Posture, migraine disorders, temporomandibular joint disorders, physical therapy.