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Postural evaluation of asymptomatic college students treated with chiropractic manipulative technique

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Introduction: Posture is a biomechanical state that has been related functionally with osseous, muscle and nervous system. Body stability is determined by interaction of these system, also regulates load or weight distribution on lower extremities. All this contributes to an adequate alignment and corporal proprioception. Incorrect posture behaviors product of daily college activities provokes malfunction of these three systems resulting in incorrect postures however those posture alterations are asymptomatic.

Objective: To analyze postural changes before and after chiropractic manipulation of asymptomatic college students.

Methods: A sample of 65 asymptomatic college students (UNEVE) were selected, two images were taken of each student before and after chiropractic manipulation using Posture Screen Software mobile version 1.3.9 (Posture Co, Inc.). Vertical line (AP) and Lateral Line (LL) from cervical, dorsal, lumbar, knees, as well as, weight were analyzed. Chiropractic manipulative treatment consisted in two adjustments per week during a 2-month period (16 adjustments) with diversified technique. At the end of treatment all images capture before and after adjustments were analyzed.

Results: For AP images (n=65) significant differences ($p<0.05$) in cervical region for the adjustments 6-10 and 14-16 were observed. For dorsal and lumbar areas, we observed significant differences from adjustments 2-16. Considering weight, we only observed significant differences at adjustments 5-10-15. For the LL images (n=65) significant differences of $p<0.05$ were obtained in cervical region for adjustments 1-5 and 9-12, dorsal area from 3-16, lumbar region at 4-7 and knees in adjustments 6-7.

Conclusion: According with our results, the chiropractic manipulative treatment lead AP and LL lines to shift towards ideal posture values and redistribution of the loads (weight) in both extremities, this treatment helped cervical, dorsal and lumbar alignment, so improving biomechanical stability in students.

Biography

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