Effects of the chiropractic treatment in runners of college student with a lumbo-pelvic biomechanical dysfunction

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90% of the adult population has a pelvic tilt with this unequal of 5.2 millimeters, including the sports. 18% have a low back pain and 16.8% of athletes have pain in the posterolateral aspect of the tibia, this causes biomechanical dysfunctions of pelvic rotations. Positive biomechanical changes have been shown with pelvic dysfunctions with chiropractic treatment. The objective was to evaluate the effect of the treatment with Gonstead technique about the correction of the biomechanics in distance runners at the UNEVE, with a pelvic tilt and lumbopelvic biomechanical dysfunction. n=41 distance runners were included. Deficiency and dysfunction was diagnosed by radiographic markers used by Gonstead technique (rule 5:2). Spine, pelvis and lower extremities were manipulated two times by week by three months. At the end of the treatment they determined the changes in the radiographic markers. The results show statistically significant changes ($p<0.05$): posterior inferior iliac (de 227.4 to 224), in the average deficiency (4.8 to 3.1), the lumbar angle (51.6 to 48.5). There was an increase in the Ferguson angle (37.7 to 39), the rest of the radiographic markers do not show significant changes that confirm an improvement in the biomechanics of the lumbo-pelvic spine. In conclusion, significant changes were observed in the biomechanical at lumbo-pelvic spine; therefore, there was improvement in the pelvic tilt and the pelvic dysfunction with chiropractic treatment.

Biography

Maria Elizabeth Herrera Lopez has completed her Doctor of Chiropractic degree at University of the Valley of Ecatepec (UNEVE) and Master's degree in Science Sport Medicine at University of Puebla and University of Pablo Olavide. She is pursuing her PhD in High Performance Sports at National Institute Polytechnic. She is Director for Chiropractic program at UNEVE.

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