Effect of chiropractic manipulation in blood serum chemistry of six elements in university runners

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Sport is constant and systematic process, it has a very important significance in terms of quality of the process is concerned. The high sports performance requires careful planning and assessment of all the factors involved in it, because as physical activity increases, so does the physiological activity of all body systems, it explain the necessity to have the support of consolidated sciences like medicine, psychology, nutrition and biophysics among others. Aim of this study is to evaluate the effect of chiropractic manipulation in blood serum chemistry of six elements in large distances runners of UNEVE. A group of 46 large distances runners of UNEVE with biomechanical alterations were included in the study. A blood serum chemistry of six elements was performed before treatment. There was manipulation of the pelvic region, spine and low extremity two times per week for three months. At the end of treatment, the biochemical changes were determined by using blood serum chemistry. Statistically significant changes ($P<0.05$): urea (41.2 to 38.0) and uric acid (5.9 to 4.2) decreased and proteins (6.6 to 7.1) increased, however, there were no significant changes in the rest of the blood elements, therefore, the lumbopelvic biomechanical alteration (subluxation) causes changes in chemical components. Chiropractic manipulation has a positive effect on the biochemical in athletes according to the sample studied; it improves urea, uric acid and total protein.

Biography

Cesar Ivan Sáenz Martinez has completed his Medical Doctor degree at National Institute Polytechnic and Master's degree in Science Sport Medicine at University of Puebla and University of Pablo Olavide. He presented his research work at Federation International of Chiropractic Sport (2015) and 9° Interdisciplinary World Congress on Low Back Pain (2016).

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