Joint Event on

14th International Conference on

FRONTIERS IN ALTERNATIVE & TRADITIONAL MEDICINE

and

World Conference on

PHARMACEUTICAL CHEMISTRY & CLINICAL RESEARCH

November 25-26, 2019 | Valencia, Spain

Biomechanical changes evaluation using Ferguson angle on patients with lumbar facet tropism treated with manipulative therapy

Claudia Letycia Rodríguez Torres, Enrique Montiel Flores, Ma Elizabeth Herrera López, Luis Alberto Carpio Becerra and Juan Jose Saldaña Mena

State University of the Ecatepec Valley, Mexico

Lumbo-Sacral angle (LS) it is a well establish reference on literature for biomechanical determination of lumbar spine alignment. Facet tropism is an embryologic and anatomic condition affecting spine joint facets biomechanics. Variability on measurement (LS) could disturb articular congruency between joint facets. Alterations of LS, has influence over proprioceptive responses and provoke several physiopathological progressive changes as: Muscles contraction dysfunction, deformities or degenerative process at joints, disks, scoliosis or any other type of degenerative condition affecting facet joints range of motion. The purpose of this study is to evaluate biomechanical changes using LS measurements on subjects treated with chiropractic. A sample of 32 college students between ages 19 to 30, participated on the study. A 68.8% (22) were females and 31.3% (males). Radiographic (AP and lateral lumbo-pelvic X-rays) measurements of LS were made to all participants before and after being treated with chiropractic. A 64.3% of the sample was identified with lumbar facet tropism. A chiropractic treatment was given during 4 weeks, 2 times per week. After treatment new radiographic measures were taken to determine biomechanical changes. Results showed that the 64.3% of subjects had lumbar facet tropism, all evaluated with radiographs. After chiropractic treatment a significant change ($p \leq 0.05$) was observed on LS measurement. Changes in all patients with facet tropism were observed (41.3 ± 6.0 to 43.5 ± 6.0 $p \leq 0.02$). The study concluded that chiropractic therapy modify measurements of LS, on patients with facet tropism at lumbar spine. This type of treatment has a positive impact on lumbar biomechanical dysfunctions.

Biography

Claudia Letycia Rodríguez Torres has completed his Master's in Chemistry Engineering. He is currently working at Ecatepec Valley State University, Mexico.

bioquimica1@outlook.com

Notes: