

A comparative study of sagittal spinal-pelvic parameters between patients with adolescent idiopathic scoliosis and healthy controls



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Biography

Li xiaohu: Ph.D., professor, supervisor of master's degree. Vice chairman and secretary general of Inner Mongolia anatomical society, standing director of Inner Mongolia digital translational medicine society, member of clinical anatomy branch of Chinese anatomical society, member of professional committee of physical anthropology, member of nursing anatomy branch. Editorial board member of the Chinese journal of clinical anatomy, the core journal of science and technology, the China medical journal and the journal of Inner Mongolia medical university.

Abstract

Statement of the Problem: This study aimed to investigate the sagittal spinal-pelvic morphological changes, as well as the relationship between pelvic anatomical changes and the spinal-pelvic plane in patients with adolescent idiopathic scoliosis (AIS), in order to provide guidelines for orthopedic surgery in AIS.

Methods: X-ray data were collected for retrospective analysis from 30 patients diagnosed as AIS from April 2014 to November 2018, along with 30 normal adolescents as control. Pelvic parameters, including pelvic incidence (PI), pelvic tilt (PT), and sacral slope (SS), a spinal parameter, lumbar lordosis (LL), and anatomical parameters, including sacral width (SW) and femoral head- sacrum distance (FH-S), were measured. AIS affects some of the sagittal spinal-pelvic parameters and anatomical parameters. In AIS, there is a significant correlation between the spinal-pelvic parameters, and the anatomical parameter is significantly correlated with multiple spinal-pelvic parameters.

Publications

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