

Abstract

The aim of this study is to compare anthropometric parameters of the trunk between a group of patients with low back pain and a control group without pain. These findings would support the theory that low back pain may be caused by non-ideal postural-locomotion development in childhood, resulting in measurable morphological variations in adulthood. 60 individuals with low back pain (patients) and 60 healthy volunteers (controls) participated in the study. It was confirmed that the distance between the jugular fossa and xiphoid process is shorter in relation to the body height in the group of patients versus the control group. Conversely, there was a significantly longer distance between the xiphoid and symphysis relative to the body height among the patients. Furthermore, diastasis of rectus abdominis muscle was observed more frequently in the low back pain group. These findings suggest that patients with low back pain present with trunk morphological differences when compared with a matching healthy group.

Keywords

Low back pain, jugular fossa to xiphoid process distance, xiphoid to symphysis distance, rectus abdominis muscle diastasis, motor development, morphology, anthropometry