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Relationship between lower limb dysmetria and plantar fasciitis

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ABSTRACT

Introduction: Plantar fasciitis is an inflammatory process of multifactorial etiology that affects the origin of the plantar fascia and surrounding structures. A difference in length between lower limbs is relatively common within the population and can sometimes cause changes in biomechanics and symptoms. The objective of this study is to evaluate the relationship between lower limb dysmetria and plantar fasciitis.

Methods: A cross-sectional study was performed to measure the length of the lower limbs by scanometry in patients diagnosed with plantar fasciitis. Other risk factors, such as body mass index, foot shape and the presence of plantar calcaneal spur, were also assessed in foot radiographs.

Results: Of the 54 patients included in the study, 44.4% were men, and the mean age was 50.38 (23-73 years); 81.5% had pain in one foot, and 53.7% had feet that were considered plantigrade. We observed dysmetria in 88.9% of the sample, with a mean of 0.749cm (SD ±0.63). In addition, 46.3% feet with pain showed calcaneal spurs on the radiographs.

Conclusion: Approximately 90% of patients showed lower-limb dysmetria and, in most cases, the side with the shorter limb was affected by plantar fasciitis.

Keywords: Lower extremity; Plantar fasciitis; Calcaneal spur syndrome.