

## Accepted Manuscript

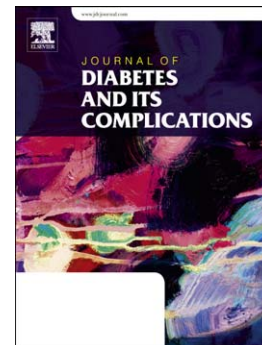
Differences in the mechanical characteristics of plantar soft tissue between ulcerated and non-ulcerated foot

Roosbeh Naemi, Panagiotis Chatzistergos, Lakshmi Sundar, Nachiappan Chockalingam, Ambadi Ramachandran

PII: S1056-8727(16)30183-0  
DOI: doi: [10.1016/j.jdiacomp.2016.06.003](https://doi.org/10.1016/j.jdiacomp.2016.06.003)  
Reference: JDC 6761

To appear in: *Journal of Diabetes and Its Complications*

Received date: 9 April 2016  
Revised date: 23 May 2016  
Accepted date: 6 June 2016



Please cite this article as: Naemi, R., Chatzistergos, P., Sundar, L., Chockalingam, N. & Ramachandran, A., Differences in the mechanical characteristics of plantar soft tissue between ulcerated and non-ulcerated foot, *Journal of Diabetes and Its Complications* (2016), doi: [10.1016/j.jdiacomp.2016.06.003](https://doi.org/10.1016/j.jdiacomp.2016.06.003)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Title: Differences in the mechanical characteristics of plantar soft tissue between ulcerated and non-ulcerated foot**

**Running title: Ulceration and plantar soft tissue mechanics**

Roozbeh Naemi <sup>a\*</sup> PhD, Panagiotis Chatzistergos <sup>a</sup> PhD, Lakshmi Sundar <sup>b</sup> MD, Nachiappan Chockalingam <sup>a</sup> PhD, Ambadi Ramachandran <sup>b</sup> MD

a: Faculty of Health Sciences, Staffordshire University, Stoke on Trent, Staffordshire, UK

b: AR Diabetes Hospitals, Chennai, Tamil Nadu, India

\*Corresponding Author: Roozbeh Naemi  
Science Centre, Leek Road  
Stoke on Trent ST4 2DF UK  
Tel. +44 (0) 1782 295879  
Fax. +44 (0) 01782 294321  
Email: r.naemi@staffs.ac.uk

**Abstract:**

**Aims:** The purpose of this study was to investigate the differences in mechanical properties of the plantar soft tissue between the ulcerated and non-ulcerated feet in patients with diabetic neuropathy.

**Methods:** Thirty nine patients who met the inclusion criteria participated in this study. Ten out of 39 participants had an active ulcer at a site other than the plantar heel and the first metatarsal head. Real time ultrasound elastography was performed to measure the soft tissue thickness and stiffness of the heel pad and sub-metatarsal fat pad. To account for the qualitative nature of conventional real time elastography, relative tissue stiffness was assessed against that of a standardised ultrasound standoff material.

Download English Version:

<https://daneshyari.com/en/article/5588111>

Download Persian Version:

<https://daneshyari.com/article/5588111>

[Daneshyari.com](https://daneshyari.com)