A systematic review and individual patient data meta-analysis of prognostic factors for foot ulceration in people with diabetes: the international research collaboration for the prediction of diabetic foot ulcerations (PODUS)

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Declared competing interests of authors: none

Published July 2015 DOI: 10.3310/hta19570

Plain English summary

Prognostic factors for foot ulceration in people with diabetes

Health Technology Assessment 2015; Vol. 19: No. 57

DOI: 10.3310/hta19570

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Plain English summary

Annual foot risk assessment of people with diabetes is recommended in national and international clinical guidelines. At present, these assessments are based on opinion and agreements among health-care professionals and are not based on all available data. We sought to review all available data using individual patient data to find out which risk factors most reliably identified people with diabetes who are at risk of foot ulceration.

We searched electronic databases for published studies and sought depersonalised data from the researchers of previous studies, and obtained copies of data from individual patients. These data were collected from more than 16,000 people with diabetes worldwide and reanalysed by us.

The analyses show that a simple-to-use and cheap test, the 10-g monofilament test, most consistently identifies those people with diabetes who are at risk of foot ulceration, regardless of if they are at low, moderate or high risk of ulceration. Foot pulses are also cheap, easy to do and predictive, although less consistently so. Diabetes foot risk assessments are more likely to be completed in clinical practice if they are easy to do. These findings could inform UK and international guidelines to ensure that people with diabetes receive cost-effective foot health care as part of their annual health assessment.

HTA/HTA TAR

Health Technology Assessment

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 5.116

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the ISI Science Citation Index.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 10/57/08. The contractual start date was in February 2012. The draft report began editorial review in June 2014 and was accepted for publication in November 2014. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health.

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