Tibial nerve stimulation compared with sham to reduce incontinence in care home residents: **ELECTRIC RCT**

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Declared competing interests of authors: Lorna Aucott is a member of the National Institute for Health Research (NIHR) Public Health Research (PHR) panel and is a NIHR COVID Recovery and Learning Call Funding Committee member. Joanne Booth reports grants from the NIHR Health Technology Assessment (HTA) programme during the conduct of the study (16/111/31 – ICONS II: Identifying Continence OptioNs after Stroke randomised controlled trial). Claire Goodman reports work as a senior investigator for NIHR outside the submitted work, and membership of the Health Services and Delivery Research (HSDR) Commissioned – Board (2009–15). Doreen McClurg was a member of the HTA End of Life Care and Add-on Studies Group (2015–16). John Norrie reports grants from the University of Aberdeen and the University of Edinburgh during the conduct of the study, and declares membership of the following NIHR boards: chairperson of the Medical Research Council (MRC)/NIHR Efficacy and Mechanisms Evaluation (EME) Funding Board (2019–present), the

Cardiopulmonary Resuscitation Decision-making Committee (2016), the Health Technology Assessment (HTA) Commissioning Board (2010–16), the HTA Commissioning Sub-Board (Expression of Interest) (2016–19), the HTA Funding Boards Policy Group (2016–19), the HTA General Board (2016–19), HTA Post-Board funding teleconference (2016–19), NIHR Clinical Trials Unit Standing Advisory Committee (2018–present), the NIHR HTA and EME Editorial Board (2014–19) and the Pre-exposure Prophylaxis Impact Review Panel (2017–present).

Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

Published June 2021 DOI: 10.3310/hta25410

Plain English summary

The ELECTRIC RCT

Health Technology Assessment 2021; Vol. 25: No. 41 DOI: 10.3310/hta25410

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Plain English summary

B ladder leakage (urinary incontinence) is common among people living in care homes. Most people wear absorbent pads to contain urine leakage, but this does not treat the cause of incontinence. Transcutaneous posterior tibial nerve stimulation is a treatment for the type of incontinence associated with a sudden need to use the toilet (urgency incontinence). Two sticky patches applied to the ankle are connected to a small electrical stimulator.

The ELECTRIC (ELECtric Tibial nerve stimulation to Reduce Incontinence in Care homes) trial looked at whether or not transcutaneous posterior tibial nerve stimulation can help reduce incontinence for people in care homes. A total of 406 residents from 37 care homes were given transcutaneous posterior tibial nerve stimulation treatment or a dummy treatment for 30 minutes, twice per week for 6 weeks. The amount of urine leaked by each resident was measured over 24 hours by collecting all pads used in a sealable plastic bag and weighing the bag. This happened after the final transcutaneous posterior tibial nerve stimulation or dummy treatment, and again after 3 and 5 months. Residents, family members and care home staff were asked if they thought that the transcutaneous posterior tibial nerve stimulation had any effect and for their views of the treatment.

We found no important difference in leakage between residents who had the transcutaneous posterior tibial nerve stimulation and those who had the dummy treatment. There were also no differences in daily pad use, feelings about bladder condition or quality of life. It cost around £120 to train staff to deliver transcutaneous posterior tibial nerve stimulation and around £80 per person to have transcutaneous posterior tibial nerve stimulation treatment. Transcutaneous posterior tibial nerve stimulation had no serious side-effects. Care home residents, even those with severe dementia, found the application of transcutaneous posterior tibial nerve stimulation acceptable. Staff found learning about incontinence helpful, but continence care routines did not change.

In summary, the ELECTRIC trial found that for very dependent older people in care homes, transcutaneous posterior tibial nerve stimulation did not reduce urinary incontinence. The findings do not support transcutaneous posterior tibial nerve stimulation use to reduce urinary incontinence in care home environments.

Health Technology Assessment

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 3.370

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

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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 15/130/73. The contractual start date was in July 2017. The draft report began editorial review in July 2020 and was accepted for publication in January 2021. 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 and Social Care. 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 and Social Care.

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