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

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

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Plain English summary

The ELECTRIC RCT

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Plain English summary

Bladder 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.

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This report

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