A PROSPECTIVE SINGLE BLINDED PLACEBO CONTROLLED STUDY INTO THE ROLE OF PERCUTANEOUS AND TRANSCUTANEOUS TIBIAL NERVE STIMULATION FOR FAECAL INCONTINENCE

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Introduction Posterior tibial nerve stimulation (PTNS) is a safe and effective treatment for faecal incontinence (FI) but it is not known whether percutaneous or transcutaneous routes of stimulation are better. The efficacy of PTNS was assessed in a prospective randomised placebo-controlled trial.

Methods Patients who had failed conservative treatment for FI were blinded and randomised to one of the three forms of stimulation: Group 1: Percutaneous, Group 2: Transcutaneous, Group 3: Sham transcutaneous. All patients had a 2 week baseline assessment of symptoms. Patients in Group 1 and Group 2 received 30 min sessions of PTNS twice weekly for 6 weeks.

Table 1 PWE-071

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<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
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<th>Group 2</th>
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<th>Group 3</th>
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<tr>
<td></td>
<td>Pre</td>
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<td>Pre</td>
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<td>Pre</td>
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<tr>
<td>Weekly incontinence episodes (SD)</td>
<td>8 (5.2)</td>
<td>2 (1.9)</td>
<td>7 (6.9)</td>
<td>5 (5.2)</td>
<td>7 (3.5)</td>
<td>5 (3.1)</td>
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<td>Ability to defer defecation in minutes (SD)</td>
<td>&lt;1 (1.2)</td>
<td>7 (5.6)</td>
<td>2 (2.7)</td>
<td>5 (5.2)</td>
<td>&lt;1 (0.7)</td>
<td>2.5 (1.9)</td>
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<td>St Mark’s Continence Score (SD)</td>
<td>19 (2.8)</td>
<td>12 (1.9)</td>
<td>18 (3.1)</td>
<td>14 (6.3)</td>
<td>16 (3.7)</td>
<td>14 (2.2)</td>
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</table>
In Group 3 transcutaneous electrodes were placed but no stimulation was delivered. All patients were assessed blind at 6 weeks; unblinded and followed up after a further 1 month to assess symptoms. Treatment success was defined as > 50% reduction in weekly episodes of faecal incontinence following the 6 weeks of PTNS when compared to baseline symptoms.  
**Results** Thirty patients (M:F 2:28) were included in the study. Nine (82%) of 11 patients in Group 1, 5 (45%) of 11 in Group 2 and 1 (12.5%) of 8 in Group 3 had a more than 50% reduction in weekly episodes of FI at the end of the 6 week study phase (table 1). Patients also showed an improvement in their ability to defer defecation and in the St Mark’s Continence scores pre and post treatment. The improved continence observed in the above patients of all the 3 groups was sustained at the 1 month post study follow-up.  
There were no complications observed in any patient.  
**Conclusion** This study demonstrates the efficacy of PTNS as a treatment option for FI in the short term.  
**Competing interests** None.  
**Keywords** fecal incontinence, Percutaneous tibial nerve stimulation, tibial nerve stimulation, transcutaneous tibial nerve simulation.

**REFERENCES**