

NEUROMODULATION VIA POSTERIOR TIBIAL NERVE STIMULATION. EFFECTIVE MANAGEMENT FOR FAECAL INCONTINENCE?

Hypothesis / aims of study

Faecal incontinence (FI) is a prevalent and important condition. Neuromodulation via sacral nerve stimulators has been shown to be effective, but is expensive and has been associated with complications. Peripheral neuromodulation via posterior tibial nerve stimulation (PTNS) has been assessed in urinary incontinence, but there is emerging evidence for its use in FI. This prospective trial assesses the efficacy of PTNS in FI.

Study design, materials and methods

Thirty five consecutive patients with FI of various causes underwent PTNS at Aintree University Hospitals NHS Foundation Trust. All were investigated with appropriate colonic imaging, anorectal physiology and endoanal ultrasound. All patients had undergone pelvic floor physiotherapy and biofeedback which had failed to achieve resolution of the symptoms. PTNS was performed for 30 minutes, weekly for 12 weeks. Outcome measures included faecal incontinence scoring and a validated quality of life (QoL) score prior to treatment and at 6 weeks and 12 weeks post intervention. Hospital Anxiety and Depression (HAD) scores were measured prior to treatment onset and at 12 weeks. Patients were reviewed at 3 months to assess recurrence of symptoms.

Results

All 35 patients completed their treatment. There was a significant reduction in the number of episodes of incontinence at 12 weeks ($p < 0.004$) while there was a significant increase in the time patients were able to defer defaecation. Patients QoL scores demonstrated significant improvement at 6 weeks ($p = 0.006$) and 12 weeks ($p < 0.0001$). HAD scores at the end of treatment were significantly improved compared to the baseline scores for anxiety ($p = 0.001$), but not significantly improved for depression ($p = 0.85$). At 3 months there was no significant increase in FI score or FI episodes.

Interpretation of results

Our ongoing study demonstrates PTNS to be a potentially efficacious, technically simple and minimally invasive alternative treatment modality for FI, resulting in a significant early improvement in patient's symptoms and quality of life.

Concluding message

Further research is required to establish the long term effects of PTNS on faecal incontinence. This research should enable clinicians to offer a standardised treatment regime for the ongoing management of faecal incontinence where PTNS has improved symptoms and therefore quality of life

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Studies effects of established treatment **Helsinki not Req'd:** It was not a clinical trial **Informed Consent:** Yes