# Leo, Cosimo Alex, et al. 2021 Abstract

### Anal Inserts Versus Percutaneous Tibial Nerve Stimulation in FI

## **Objective**

The study compared the use of anal inserts and percutaneous tibial nerve stimulation for the treatment of patients with fecal incontinence (FI).

#### Results

Both anal insert and percutaneous tibial nerve stimulation improved the symptoms of fecal incontinence after three months of treatment. The primary end point was a 50% reduction of episodes of fecal incontinence per week as calculated by a prospectively completed two-week bowel diary.

### **Participants and Researchers**

A total of 50 adult patients with passive or mixed fecal incontinence were recruited for the study.

The researchers were: Cosimo Alex Leo, MD, Department of Surgery, St Mark's Hospital and Academic Institute, London, England, Department of Surgery and Cancer, Imperial College, London, and Department of Surgery, The Royal London Hospital; Gregory P. Thomas, MD, Department of Surgery, St Mark's Hospital and Academic Institute; Jonathan D. Hodgkinson, MBBS, Department of Surgery, St Mark's Hospital and Academic Institute and Department of Surgery and Cancer, Imperial College; Marjolein Leeuwenburgh, MD, Department of Surgery, The Royal London Hospital, and Department of Surgery, Haaglanden Medisch Centrum, Den Haag, The Netherlands; Ellie Bradshaw, RGN, MSc and Janindra Warusavitarne, PhD, both from the Department of Surgery, St Mark's Hospital and Academic Institute; Jamie Murphy, PhD, Department of Surgery, St Mark's Hospital and Academic Institute, and Department of Surgery and Cancer, Imperial College.

## **Methods**

Of the 50 patients, 25 were randomly assigned to anal inserts and 25 were randomly assigned to percutaneous tibial nerve stimulation for a period of three months. All completed their treatment. No adverse events were reported by the study participants during the study period.

**Percutaneous tibial nerve stimulation (PTNS)** was given using a **NeuroTrac TENS** (Verity Medical) transcutaneous electrical nerve stimulator via two electrode pads. The Renew anal insert (Renew Medical) is placed by the patient using a fingertip applicator.

The treatment was given in 12 outpatient sessions of 30 minutes each, once a week at the St Mark's Hospital. It could be argued that PTNS and Renew anal insert have different mechanisms of action and thus do not have to be compared in a randomized way, given that both these treatments are safe and efficacious for some FI cohorts and therefore can be trialled for patients in whom conservative treatment measures have failed.

The full abstract can be found at https://pubmed.ncbi.nlm.nih.gov/33399411/.