

# Patient's Experience of using TENS at Home for Intermittent Claudication (IC) Pain.

Patricia A Roche<sup>1</sup>, Chris Seenan, Linda Orr, Stephen McSwiggan, Chee-Wee Tan, Tom Mercer, Jill Belch



Correspondence: [prpatzmail@gmail.com](mailto:prpatzmail@gmail.com)

## Background

Our laboratory, clinical and qualitative studies identified high frequency TENS as a likely aid to (a) the capability to self-manage clinically recommended exercise, and (b) the capacity to walk, in patients with Peripheral Arterial Disease (PAD) and intermittent claudication (IC) pain, when walking (1-3).

Our results also reflected a sense of frustration, and mixed outcomes, from daily home applications of TENS.

We now provide more detailed feedback on patient's experience of living with PAD, and using TENS for IC pain, when walking at home.

## Aim

To elucidate, from patient's feedback, the most useful guidance that health professionals can give to patients, in order to improve the patient experience, and clinical outcome, from their home use of TENS for IC pain.

## Method

A pragmatic phenomenological focus group study design.

A convenience sample of six people with IC. Participants [selected from a separate study (2)] were independently trained to apply TENS, and instructed to use it, as necessary, during daily living for one month. A focus group discussion followed which explored the experience of living with IC and the home use of TENS.

Participants were invited to respond to 7 sets of pre-arranged statements that covered: attitudes towards walking & PAD; the pain of IC; the ease of use, and the utility, of TENS for their leg pain, whilst walking & for walking capacity (Table 1). The primary researcher, and an independent researcher, moderated the focus group discussion and noted interactions and body language, respectively

The transcribed text was analysed using manifest and latent content analysis.

Table 1: Focus Group Topic Guide extract

- "The worst part of the disease is the pain" -What frustrates you most about the disease? -When you think about your medical problems, what first jumps into your mind?	- "TENS is the perfect treatment for walking in IC" -Does TENS make any difference to you? - How does it affect your walking? -Does its effectiveness wear off?	- "TENS is easy to use for people with PAD and IC" -What would you change about it? - Would you use it differently?	- "TENS is not for me" -What is it about using TENS that you don't like? -Do you like the feeling of the stimulation? - Are you self-conscious when using TENS? - Do you tell people you are using it?
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## Results

The results were characterised by participants feelings of frustration and by an overall, but insufficient, improvement in IC pain and walking capacity, from using TENS.

This was interpreted through the following themes:

- 'transient, yet chronic pain'
- 'lifestyle limitations'
- 'knowledge and understanding'
- 'grin and bear it'

The experience of using TENS in daily life was characterised by both benefit and disappointment. This was interpreted through the following themes:

- 'walking further, but not far enough'
- 'masking, but not taking the pain away'

"you're walking and the pain is there, you stop walking and you sit down, 2 minutes and its gone .... what the hell is going on here? .... it is frustrating, very frustrating" P4

"asked to come and do something, the first thing you think of is how much walking is involved ..... and will I just be a damned nuisance if I go because I will be trailing back and behind the others .... you know? And you just don't go" P2

"if I didn't have the TENS and this particular course I'm thinking, I could never get round that [golf] course without stopping and having to shake my leg and wait a minute which becomes quite embarrassing" P1

"I still had it (the pain) but it was a different form of pain ..... it was sort of numbing, not so sore but it was still there" P3

"I put it on when I was playing bowls but once the tingle is there and you are on the bowls you just forget it is there ..... I don't think it is helping but you forget that the pain is there" P4

"that's what puzzling me all these years and it has been going on almost 10 years now and I keep saying to the surgeon and all that and they said we could tell you what the problem is and we could fix it but we don't know what the problem is so all this is probably helping" P4

"it is, they keep saying 'grin and bear it' and that's all I have been doing for years and years now ..... (P5) yeah, me too, the very same. I'm just like, it will be 5 year, maybe 6 years I have had it and you just have to put up with it" P4

"it numbed the pain, you maybe walked a wee bit further. I did notice a couple of times my foot went numb when I had the machine on. Well that has happened before without the machine but it seemed to come on a bit earlier" P3

## Conclusions & Relevance for Patient Care

The patient's voice helps to educate both Health Professionals and their patients. The feelings of frustration in our focus group were linked to all aspects of the disease, and to the moderate, intermittent but persistent pain of IC. The participant's expressed frustration about (A) other people's attitudes, (including perceived platitudes from health professionals about "putting up with it"), and (B) the poor understanding of the debilitating outcomes of PAD and IC on their activities, goal achievement, socialization and self-esteem. Our results call upon health professionals to commit to a more global and biopsychosocial assessment of PAD's effects, and to improved education of the community.

Using TENS during daily life brought both benefit and disappointment. TENS gave pain relief to all participants. Walking capacity improved to a greater or lesser extent. Improvements were, however, transitory, and / or felt to be inadequate, which resulted in frustration. Clinicians prescribing TENS for IC self-management should educate, but also manage, their patients expectations of TENS, i.e. that TENS is (i) a non-invasive, safe, inexpensive and user- friendly form of analgesic; (ii) a self-managing tool for "masking" or "modifying" (rather than 'alleviating') episodes of IC pain, and (iii) an aid to motivation and daily activities, particularly when planning several hours outdoors.

It is essential that patients comply with, and maintain, self-managed therapies for chronic pain. Our results indicate that the patient's feedback, in addition to in-depth investigation, is required to inform health professionals and to optimize patient's lived experience of a maintenance therapy, in this case TENS.

### References:

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