User experiences, preferences and choices relating to Functional Electrical Stimulation and Ankle Foot Orthoses for foot-drop after stroke

Abstract

Objectives: This study explores experiences, preferences and choices relating to use of Ankle Foot Orthosis (AFO) and FES for foot-drop by people who have suffered a stroke and by their carers, with the aim of informing clinical decision making.

Design: Semi-structured interviews explored individual experiences through a phenomenological approach. The Interpretative Phenomenological Analysis framework was used to enable organisation and interpretation of qualitative interview data.

Setting: Participants who had used both transcutaneous FES and one of several types of AFOs were recruited from a single FES Clinic.

Participants: Nine people who had suffered a stroke and four carers were recruited purposively, including people between two and nine years post-stroke, with different degrees of difficulty in walking.

Results: Participants described experiences, preferences and choices relating to AFO and FES use. All but one person (patient and carer) preferred FES use and related this to experiences of being able to move the ankle more freely, walk more normally, safely and independently, and experiencing greater comfort. Several people also used AFOs when the FES equipment failed, when travelling, and for use near water. One person rationed their use of FES on a daily basis due to allergic reactions.
Conclusions: The consensus in this sample demonstrated positive and negative experiences of both FES and AFO use. Participants weighed up pros and cons and despite predominant preferences for FES, many also used AFOs due to some drawbacks of FES. Further research and development are required to reduce drawbacks and further explore user experiences.