User experiences, preferences and choices relating to functional electrical stimulation and ankle foot orthoses for foot-drop after stroke

Bulley, C, Shiels J, Wilkie K, Salisbury L

Objectives To explore experiences, preferences and choices relating to the use of ankle foot orthoses (AFOs) and functional electrical stimulation (FES) for foot-drop by people who have suffered a stroke and 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 AFO were recruited from a single FES clinic.

Participants Nine people who had suffered a stroke and four carers were recruited purposively, including people between 2 and 9 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 expressed a preference for FES use and related this to being able to move the ankle more freely; walk more normally, safely and independently; and greater comfort. Several people also used AFOs when the FES equipment failed, when travelling and 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 the 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 users’ experiences.

Physiotherapy, Queen Margaret University, Musselburgh, East Lothian EH21 6UU, UK
Physiotherapy, Astley Ainslie Hospital, Edinburgh, UK
Centre for Integrated Healthcare Research, Nursing Studies, University of Edinburgh Medical School, Edinburgh, UK