

Applicability of and experience with SilverFit Rephagia by patients with Huntington's disease in day care

Eline Kerkdijk¹, Miranda van der Laak¹,
Maaïke Nieuwkamp¹, Yvonne Zwaagstra¹ and Loes van Dusseldorp¹

¹Atlant, Huntington Centre of Expertise, Apeldoorn, the Netherlands

Background

78% of patients with Huntington's disease (HD) suffer from dysphagia. The treatment of the speech therapists in Atlant is focused on compensation strategies and swallowing advices. Literature shows positive results on improving the swallowing function in patients with CVA, head and neck cancer and Parkinson's disease by actively training with biofeedback. SilverFit Rephagia is a training program with a series of exercises to improve the swallowing function, by using a biofeedback system with a sEMG electrode. The swallowing response can be shown by graphs or as game shaped exercises. It is unknown whether SilverFit Rephagia is applicable to HD patients and what their experiences are.

Aims

Insight in the applicability, and patient experiences with SilverFit Rephagia by HD patients in a day care program.

Methods

A practice based evaluation study is performed amongst HD patients in day care. Each patient participated in 3 training sessions. During each session, the patient was observed by the speech therapist about the applicability of the training program and possible contra indications. In addition patients were interviewed by the therapist concerning their experiences with the program. Figure 1 shows a patient practicing with the program.

Patient:
"I think it's fun and educational, because I can see what happens."



Figure 1. Practicing with SilverFit Rephagia

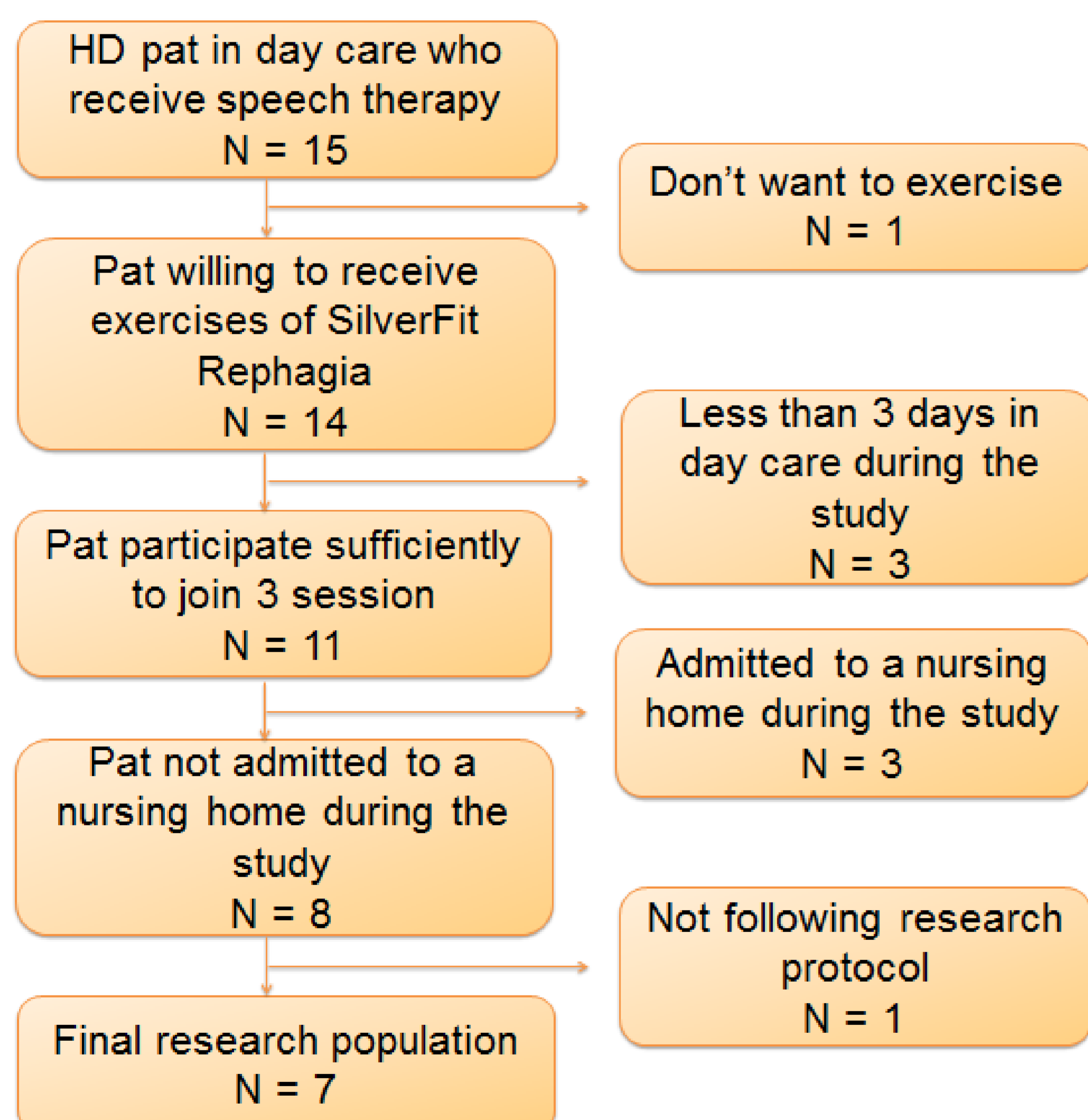


Figure 2. Participant flow chart

Results

Of the total of 15 potential participants 7 HD patients were included (figure 2). Observations showed that despite the chorea the sEMG electrode stays in place. However, because of the chorea the swallowing movement needed to be selected manually by the speech therapist, instead of automatically by the program. Six patients were sufficiently concentrated during all sessions. All patients finished each session within the determined 45 minutes and responded enthusiastic about the possibility to train the swallowing function in this way. They claimed that the program enhanced their motivation to practice.

Conclusions

This study indicates that the SilverFit Rephagia program is applicable in the treatment of dysphagia in HD patients in day care. Selecting the swallowing movement manually, is seen as conditional.

Correspondence:
Eline Kerkdijk
Speech Therapist

Eline.Kerkdijk@atlant.nl
www.atlant.nl