Evaluation of the use of Innowalk by two patients, 4–6 times a week respectively

Patient 1

Man born 1984. 31 years of age.
Bilateral cerebral palsy GMFCS III
Activity level 1 (based on the Saltin–Grimby Physical Activity Level Scale)

Targets

No explicit targets under the heading “Goals” in the notes but patient has following aim: - to raise the activity level.
Trained 36–45 minutes, 5–6 times a week.

Results relative to targets

The baseline measurements taken are shown in brackets. Measurements are reported where they differ from the baseline.

The patient has clearly achieved his target in that he has trained on so many occasions. Patients says himself that for once he finds being active enjoyable and positive.

Measurements

3 metres 41 steps (39 steps)
Outward rotation of hip: left 55 (50)
Knee extension: right -20 (-30); left -35 (-40)
Hamstring angle: left 120 (110)

Results, miscellaneous – side effects
He thinks his gastrointestinal function has probably improved.

Patient 2

Man born 1957. 58 years of age.
Bilateral cerebral palsy GMFCS III
Activity level 2 (based on the Saltin–Grimby Physical Activity Level Scale)
Plays table tennis once a week.

Targets

No explicit targets under the heading “Goals” in the notes but patient has following aims:
- to improve stamina
- to achieve “up and go” more easily/quickly
- to be able to climb on to low stool more easily (get in and out of electric wheelchair and ordinary car)

Trained 45–60 minutes, 4 times a week

Results relative to targets

The baseline measurements taken are shown in brackets. Measurements are reported where they differ from the baseline.

The targets the patient set have been achieved: he is walking with improved balance and strength according to what he says, and finds it easier to climb into and out of an electric wheelchair and car. “Up and go” is both quicker and easier.

Measurements

TUG (Timed Up and Go) 26 secs (31 secs)
Walking with self-selected stride length – no change.
Walking with as long a stride length as possible – 23 secs for 12 steps (32 secs for 12 steps)
Standing hip flexion – raising the foot: right 11 cm (6 cm); left unchanged at 15 cm.
Outward rotation of hip: right 54 (40); left 42 (33)
Hip flexion: right 103 (97)
Knee flexion: left 150 (140)
Hamstring angle: 135 (118)

Results, miscellaneous – side effects

Easier to walk.
Better balance (doesn’t hold on to the walls so often)
Tonus generally reduced during activity.
Always manages to get foot up on the footplate of electric wheelchair and to climb in and out of car at the first attempt. (2–4 attempts)
Table tennis is going better; patient is standing more upright and not getting pain in the curve of the back. (Pain in curve of back after each training session)

Summary

Our two test subjects were people with cerebral palsy GMFCS III, activity levels 1 and 2 (according to the Saltin-Grimby Physical Activity Level Scale). The most important thing for us (two registered physiotherapists) to say in summary is that this training method suited our test subjects very well. Many of our patients, particularly those with GMFCS III, have difficulty finding forms of training where they feel comfortable, which they can do independently and where the training in itself produces tangible results for them. The Innowalk achieved this.
In a short time, we were able to record measureable results and could see that our motivational talks were no longer required to get the patients to do their training. The patients found the training pleasurable and were more likely to do more than fewer sessions than had been agreed.

Britt-Marie Rydh Berner
leg Sjukgymnast
Tonusmottagningen R 61
britt-marie.rydh-berner@ds.se

Lotta Ahlborg
leg Sjukgymnast
Vuxenhabiliteringen R 61
lotta.ahlborg@ds.se

Rehabiliteringsmedicinska Universitetskliniken Stockholm
Danderyds sjukhus AB
141 86 Stockholm

Made for Movement have permission to quote the results from the two cases made by Britt-Marie Rydh Berner and Lotta Ahlborg Physiotherapists at Danderyds hospital Stockholm