

IGO: a technique for people with stroke to Independently Get up Off the floor

progress report of a before-and-after case series study

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Introduction

Falls are common among stroke survivors. Fear of not being able to get up after a fall may limit mobility and confidence, and so restrict participation in daily life. However, learning to get up after a fall is rarely taught. A method for independently getting off the floor (IGO) has been developed specifically for people with hemiplegia. We are conducting a before-and-after case series to examine the safety, feasibility and potential efficacy of this technique.

Methods

People with residual disability after stroke, who are unable to get up from the floor without assistance or supports, were taught IGO. Each received up to six one-to-one sessions, led by an exercise professional trained to work with stroke survivors (see Figure 1).

Safety is assessed by experts viewing video recordings of sessions and by biomechanical analysis. Feasibility is assessed by semi-structured interviews with participants and exercise professionals and efficacy by a dichotomous rating of ability to get off the floor without assistance or supports in less than five minutes, with re-assessment two months post-intervention.



Figure 1: Learning the IGO technique

Findings to date

Eleven people were recruited. Demographics and outcomes are given in Table 1

Case	age	sex	TSS	mRS	Sessions received	Success
1	64	F	5y	3	6	N
2	86	F	11y	2	1	withdrew
3	57	M	6y	3	6	Y
4	65	F	3m	2	1	Y
5	71	M	5y	2	6	N
6	65	F	7y	3	6	Y
7	78	F	5y	2	1	Y
8	53	M	3y	3	1	Y
9	73	M	14y	2	2	Y
10	60	M	12y	3	6	N
11	51	F	10y	2	4	Y

Table 1: data for individual cases.

TSS=time since stroke; mRS=modified Rankin Score.

Success = ability to rise from floor without support in <5 minutes.

- Of 10 people who completed training, seven mastered IGO, three within one training session. One person withdrew after one session for personal reasons.
- 5/7 people who mastered IGO were still able to use it two months after completing training.
- Failure to master IGO within six sessions appeared to be associated with poor physical fitness and strength rather than modified Rankin Score.
- No significant adverse events were reported, and subgroup biomechanics analysis revealed no safety concerns.
- Expert panel video analysis of IGO training and use is currently being conducted.
- Several of those mastering IGO have reported psychological benefits and increased motivation to exercise.

Preliminary conclusions

IGO can be taught safely, and selected long-term stroke survivors can master this functional activity.

A larger study is warranted to investigate the effect size, clinical and cost effectiveness as well as implementation issues.

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