

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

## 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 (paralysis of the arm, leg and trunk on one side of the body). We conducted a before-and-after case series to examine the safety, practicality and effectiveness of this technique.

### Methods

Eleven people with disability after stroke and who were able to get up with support, but 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 was assessed by (1) analysis of movement at knee and wrist joints considered at potential risk of strain during IGO, and (2) a panel of experts, who viewed video recordings of training and practice sessions. Practicality was assessed by semi-structured interviews with participants and trainers, and effectiveness was measured by ability to get off the floor without assistance or supports in less than five minutes, or not.

Those mastering IGO were reassessed for maintaining the skill two months later.



Figure 1: Learning the IGO technique

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	N
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.

### Results

Ten participants completed training. One withdrew after the initial session for personal reasons. Compared to start, six participants achieved the IGO ability immediately after training and three achieved this within a single training session. On average, participants mastered IGO in 3.6 sessions (standard deviation: 2.4).

Five out of nine retained the skill at follow-up and one was not available for follow-up assessment. Case 3 learned IGO but was not considered independent because he required verbal prompting to complete IGO. All who completed training became less dependent on help to get up.

Interviews suggested the training was valued by all those completing it, whether or not they mastered IGO. The trainers felt that participants who did not master IGO could have done so with further strength training.

Analysis of movement found no evidence of risk of ligament strain at assessed joints. The expert panel found some risk of falling during training but judged the risk acceptable in the training setting. Substantial adaptations of the standard IGO approach were observed, depending on individual disabilities and preferences. The panel concluded that IGO training could safely and feasibly be incorporated into the rehabilitation (treatment) of selected stroke survivors.

### Conclusion

The IGO technique may have value in rehabilitation after stroke. Larger studies investigating its practicality and its clinical and cost effectiveness are needed.

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