Ailie Turton, Paul Cunningham et al. 2016

Home-based Reach-to-Grasp training for people after stroke is feasible: a pilot randomised controlled trial

Supplementary Tables

Table i): RTG treatment received and adherence to self-practice

	Randomised to RtG (n=24)		Randomised to Usual care (n=23)		Total (n=47)		Number of missing values	
	Median	IQR	Median	IQR	Median	IQR	RTG	Usual care
TREATMENT INTENSITY (THERAPIST'S VISITS)								
Completed all 14 RtG intervention visits	16	66.7%			16	66.7%	0	
Number of visits out of 14 completed per participant	14	(13.0, 14.0)	10.5	(5.0, 14.0)	13.5	(10.0, 14.0)	0	5
Total treatment duration (hours)	8.4	(7.7, 9.3)	5.3	(4.2, 8.0)	8.1	(5.5, 9.1)	0	6
Average upper limb treatment per visit (mins) *	38.5	(35.4, 48.8)	38.6	(30.0, 45.0)	38.6	(35.0, 47.7)	0	6
Average visit duration (mins) *	60.7	(59.8, 62.1)	38.6	(30.0, 45.0)	56.1	(42.9, 60.8)	0	6
Total repetitions (all participants)	2198.5	(1249.0, 2943.0)	110	(54.0, 283.0)	1260	(283.0, 2576.0)	0	12
Repetitions per visit	157	(96.1, 210.6)	16.3	(6.3, 24.3)	102.2	(24.3, 197.9)	0	12
ADHERENCE (SELF PRACTICE RtG)								
Number of days practice out of 42	14	(6.0, 26.0)			14	(6.0, 26.0)	3	
Total number of reps	642	(170.0, 2080.0)			642	(170.0, 2080.0)	7	
Number of reps per day*	70	(47.3, 141.2)			70	(47.3, 141.2)	7	
Total time (hours)	6.5	(1.5, 12.8)			6.5	(1.5, 12.8)	3	
Time per day (mins) *	30	(22.2, 44.5)			30	(22.2, 44.5)	3	

Notes:

** Averages generated using only days or visits where relevant data had been recorded (no records available for 3 RTG participants, partial records for the remaining 21)*

Table ii): Functional Assessment: Wolf Motor Function Test (WMFT)

		Randomised to RtG (n=24)		Randomised to Usual care (n=23)		Total (n=47)		Missing			
								Not attempted		Failed (too slow)	
								RTG	Usual care	RTG	Usual care
		Median	IQR	Median	IQR	Median	IQR	n	n	n	n
Number of tasks completed in under 120s	Baseline	6	(3.0, 11.5)	4	(3.0, 10.0)	6	(3.0, 10.0)	0	0		
	7 weeks	8	(5.0, 14.0)	5	(3.0, 11.0)	7	(3.0, 12.0)	1	4		
	3 months	10	(5.0, 13.0)	6.5	(3.0, 11.0)	8	(3.0, 12.0)	1	5		
	6 months	8.5	(4.5, 13.5)	6	(3.0, 14.0)	7	(3.0, 14.0)	8	10		
Median time for tasks 1 to 6	Baseline	2.5	(2.0, 5.0)	2	(2.0, 2.5)	2.5	(2.0, 5.0)	0	0	15	18
	7 weeks	2	(1.3, 2.5)	2	(2.0, 4.0)	2	(1.5, 3.0)	1	2	11	14
	3 months	2	(2.0, 2.5)	2.5	(1.0, 2.5)	2	(2.0, 2.5)	1	4	9	12
	6 months	3	(2.0, 3.0)	2	(1.0, 3.0)	2	(2.0, 3.0)	8	10	7	7
Median time for tasks 8 to 13	Baseline	8.5	(3.8, 16.3)	13	(3.8, 21.3)	9.3	(3.8, 20.0)	0	0	20	19
	7 weeks	5	(3.0, 8.0)	8	(2.0, 16.0)	5.5	(3.0, 8.0)	1	2	16	18
	3 months	6	(3.0, 7.0)	3	(2.8, 4.5)	4	(3.0, 7.0)	1	4	17	15
	6 months	6.5	(4.5, 9.3)	4	(2.5, 11.5)	5	(4.0, 10.5)	8	8	12	10
Median time for tasks 15 to 17	Baseline	17	(9.5, 30.0)	18.5	(12.0, 25.0)	17	(12.0, 25.0)	0	0	20	21
	7 weeks	8	(7.5, 10.0)	13	(12.0, 14.0)	10	(8.0, 12.0)	1	4	19	17
	3 months	8	(6.5, 10.5)	8	(5.0, 11.0)	8	(6.0, 11.0)	1	5	19	16
	6 months	14	(12.0, 16.0)	6	(5.0, 7.0)	7	(6.0, 12.0)	8	8	14	12
Median quality for all tasks	Baseline	1	(1.0, 3.0)	1	(1.0, 3.0)	1	(1.0, 3.0)	0	0		
	7 weeks	3	(1.0, 5.0)	1	(0.0, 3.0)	2	(0.0, 4.0)	3	5		
	3 months	3	(0.0, 5.0)	1	(0.0, 5.0)	2	(0.0, 5.0)	2	5		
	6 months	2	(0.0, 4.5)	0.5	(0.0, 5.0)	1	(0.0, 5.0)	8	9		
Median box weight (lb)	Baseline	1	(0.0, 3.0)	0.5	(0.0, 2.0)	1	(0.0, 2.0)	1	1		
	7 weeks	2	(0.0, 6.0)	0	(0.0, 1.5)	1	(0.0, 4.0)	3	3		
	3 months	2	(0.0, 6.0)	1	(0.0, 4.0)	1	(0.0, 6.0)	1	4		
	6 months	2	(0.0, 6.0)	0.5	(0.0, 6.0)	2	(0.0, 6.0)	9	9		
Median grip strength (kg)	Baseline	0	(0.0, 5.0)	0	(0.0, 3.0)	0	(0.0, 4.0)	1	0		
	7 weeks	2	(0.0, 7.0)	0	(0.0, 2.0)	0.5	(0.0, 5.5)	1	2		
	3 months	3	(0.0, 10.0)	0	(0.0, 2.0)	0	(0.0, 9.0)	2	5		

		Randomised to RtG (n=24)		Randomised to Usual care (n=23)		Total (n=47)		Missing			
								Not attempted		Failed (too slow)	
								RTG	Usual care	RTG	Usual care
		Median	IQR	Median	IQR	Median	IQR	n	n	n	n
	6 months	1	(0.0, 8.0)	0	(0.0, 8.0)	0	(0.0, 8.0)	8	8		
Median time for all tasks	Baseline	8	(2.0, 10.0)	7.5	(4.0, 11.0)	8	(4.0, 10.0)	0	0	21	21
	7 weeks	3	(2.5, 4.0)	5	(3.0, 7.0)	3	(3.0, 5.0)	1	4	19	17
	3 months	2.5	(2.0, 3.0)	2.5	(2.0, 3.0)	2.5	(2.0, 3.0)	1	5	19	16
	6 months	4	(4.0, 4.0)	2	(1.0, 3.0)	2.5	(1.5, 3.5)	8	10	15	10

Table iii): Functional Assessment: Stroke Impact Scale (SIS)

	Randomised to RtG (n=24)		Randomised to Usual care (n=23)		Total (n=47)		Number of missing values	
	Median	IQR	Median	IQR	Median	IQR	RTG	Usual care
Physical								
Baseline	41	(31.0, 56.0)	50	(31.0, 63.0)	44	(31.0, 63.0)	0	0
7 weeks	50	(38.0, 63.0)	53	(44.0, 56.0)	50	(44.0, 63.0)	1	1
3 months	50	(38.0, 63.0)	50	(38.0, 56.0)	50	(38.0, 63.0)	2	2
6 months	44	(38.0, 50.0)	38	(31.0, 56.0)	44	(31.0, 56.0)	9	7
Memory and thinking								
Baseline	77	(51.5, 94.5)	86	(54.0, 96.0)	79	(54.0, 96.0)	0	0
7 weeks	86	(71.0, 96.0)	75	(61.0, 100.0)	82	(68.0, 96.0)	1	1
3 months	82	(64.0, 96.0)	89	(79.0, 98.0)	89	(79.0, 96.0)	3	3
6 months	75	(54.0, 93.0)	80.5	(50.0, 100.0)	75	(54.0, 100.0)	9	7
Emotion								
Baseline	62.5	(57.0, 67.0)	58	(47.0, 67.0)	61	(53.0, 67.0)	0	0
7 weeks	61	(61.0, 69.0)	61	(53.0, 69.0)	61	(56.0, 69.0)	2	1
3 months	64	(53.0, 69.0)	61	(56.0, 65.5)	62.5	(56.0, 67.0)	2	3
6 months	67	(61.0, 69.0)	56	(50.0, 62.5)	61	(53.0, 67.0)	11	7
ADL								
Baseline	48	(35.0, 65.0)	50	(40.0, 68.0)	50	(37.5, 68.0)	1	2
7 weeks	51.5	(35.0, 70.0)	60	(45.0, 75.0)	57	(40.0, 72.5)	2	1
3 months	53	(33.0, 73.0)	61.5	(54.0, 72.5)	58.5	(45.0, 73.0)	2	3
6 months	57	(40.0, 75.0)	60	(50.0, 75.0)	57	(50.0, 75.0)	9	8
Mobility								
Baseline	61	(32.0, 78.0)	75	(50.0, 86.0)	69	(42.0, 81.0)	0	0
7 weeks	63.5	(44.0, 89.0)	75	(67.0, 89.0)	72	(58.0, 89.0)	2	2
3 months	81	(44.0, 89.0)	83	(72.0, 89.0)	83	(54.5, 89.0)	3	4
6 months	75	(53.0, 92.0)	78	(67.0, 89.0)	78	(64.0, 89.0)	9	8
Hand function								
Baseline	0	(0.0, 15.0)	0	(0.0, 5.0)	0	(0.0, 10.0)	0	0
7 weeks	5	(0.0, 25.0)	0	(0.0, 20.0)	0	(0.0, 22.5)	1	2
3 months	0	(0.0, 35.0)	0	(0.0, 22.5)	0	(0.0, 30.0)	3	3
6 months	0	(0.0, 30.0)	7.5	(0.0, 20.0)	0	(0.0, 25.0)	11	7

	Randomised to RtG (n=24)		Randomised to Usual care (n=23)		Total (n=47)		Number of missing values	
	Median	IQR	Median	IQR	Median	IQR	RTG	Usual care
Participation								
Baseline	41	(34.0, 53.0)	34	(25.0, 41.0)	38	(28.0, 47.0)	1	0
7 weeks	50	(38.0, 66.0)	47	(36.0, 59.0)	50	(38.0, 59.0)	1	3
3 months	50	(34.0, 66.0)	50	(38.0, 56.0)	50	(36.0, 61.0)	3	4
6 months	47	(34.0, 63.0)	48.5	(31.0, 66.0)	47	(31.0, 66.0)	11	9
Stroke recovery								
Baseline	40	(30.0, 50.0)	50	(40.0, 60.0)	45	(33.0, 60.0)	0	0
7 weeks	50	(40.0, 60.0)	50	(40.0, 60.0)	50	(40.0, 60.0)	1	2
3 months	50	(40.0, 60.0)	50	(40.0, 65.0)	50	(40.0, 60.0)	2	3
6 months	55	(30.0, 60.0)	50	(40.0, 65.0)	50	(35.0, 65.0)	9	8