

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 | | | |
|---|----------|-----------------------------|--------------|------------------------------------|--------------|--------------|--------------|------------------|--------------------|----------------------|--------------------|
| | | Median | IQR | Median | IQR | Median | IQR | Not attempted | | Failed (too slow) | |
| | | | | | | | | RTG n | Usual care n | RTG n | Usual care 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 | | | |
|---------------------------|-----------------------------|-------------|------------------------------------|-------------|--------------|-------------|------------------|--------------------|----------------------|--------------------|
| | Median | IQR | Median | IQR | Median | IQR | Not attempted | | Failed (too slow) | |
| | | | | | | | RTG n | Usual care n | RTG n | Usual care 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 |