**Supplementary Materials**

**Appendix 1**

**Table 7** Search strategy in Ovid Medline database

|  |
| --- |
| 1. cerebrovascular disorders/ or exp basal ganglia cerebrovascular disease/ or exp brain ischemia/ or exp carotid artery diseases/ or exp intracranial arterial diseases/ or exp "intracranial embolism and thrombosis"/ or exp intracranial hemorrhages/ or stroke/ or exp brain infarction/ or vasospasm, intracranial/ or vertebral artery dissection/
2. (stroke or poststroke or post-stroke or following stroke or cerebrovasc$ or cerebral vasc$ or cerebral vas$ accident or cerebrovascular accident brain vasc$ or cerebral vasc$ or cva$ or apoplex$ or SAH).tw.
3. ((brain$ or cerebr$ or cerebell$ or intracran$ or intracerebral) adj5 (isch?emi$ or infarct$ or thrombo$ or emboli$ or occlus$)).tw.
4. ((brain$ or cerebr$ or cerebell$ or intracerebral or intracranial or subarachnoid) adj5 (haemorrhage$ or hemorrhage$ or haematoma$ or hematoma$ or bleed$)).tw.
5. hemiplegia/ or exp paresis/
6. (hemipleg$ or hemipar$ or paresis or paretic).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. sensation/ or exp proprioception/ or exp kinesthesis/ or exp touch/or exp touch perception/ or exp sensation disorders/ or exp somatosensory disorders/ or exp stereognosis/ or exp agnosia/ or exp psychomotor disorders/or exp electric stimulation/
9. (sensation or sensory or somatosensory or propriocept$ or kinesthesi$ or touch or stereognosis or tactile or two-point discrimination or position sense).tw.
10. (sensory train$ or sensory retrain$ or sensory education or sensory re-education or sensory reeducation or sensory rehabilitat$ or sensory practice or sensory treatment$ or sensory awareness or sensory movement$ or sensory intervention$ or sensory discrimin$).tw.
11. (cutaneous stimulat$ or electrical stimulat$ or electric stimulat$ or stimulat$ therap$ or afferent stimulat$ or sensory stimulat$ or somatosens$ stimulat$).tw.
12. 8 or 9 or 10 or 11
13. 7 and 12
14. limit 14 to human
 |

**Appendix 2** Forest plot illustrating the effect size (95% CIs) for sensory training compared to usual care



**Figure 4** Functional Ambulation Category (FAC)



**Figure 5** Motor Assessment Scale (MAS)



**Figure 6** Box and Block Test (BBT)



**Figure 7** Barthel Index (BI)



**Figure 8** Berg Balance Scale (BBS)



**Figure 9** Fugl-Meyer Assessment (FMA)

**Appendix 3** Forest plot illustrating the effect size (95% CIs) for sensory training compared to sham



**Figure 10** Action Research Arm Test (ARAT)



**Figure 11** Wolf Motor Function Test (WMFT)



**Figure 12** Motor Activity Log (MAL)



**Figure 13** Stroke Impact Scale (SIS)



**Figure 14** Fugl-Meyer Assessment (FMA)



**Figure 15** Nottingham Sensory Assessment (NSA)

**Appendix 4**

**Table 8** Studies awaiting classification/consideration

|  |
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| References |
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 |

**Appendix 5**

**Table 9** Study Exclusions

|  |  |
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| References | Reason |
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 | Intervention: acupoint electrical stimulation |
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 | Intervention: acupoint electrical stimulation |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: acupoint electrical stimulation |
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 | Study design: not an RCT |
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 | Study design: not an RCT |
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 | Summary of an included RCT |
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 | Intervention: manipulating sensory input |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: mirror therapy |
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 | Study design: not an RCT |
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 | Study design: not an RCT |
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 | Study design: not an RCT |
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 | Study design: not an RCT |
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 | Intervention: mirror therapy |
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 | Study design: not an RCT |
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 | Intervention |
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 | Intervention: stimulation elicits motor contraction |
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 | Study design: not an RCT |
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 | Intervention: brain computer interface |
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 | Study design: not an RCT |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: acupuncture |
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 | Intervention: acupuncture |
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 | Intervention: stimulation elicits motor contraction |
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 | Study design: not an RCT |
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 | Intervention: robotic therapy |
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 | Intervention: FES |
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 | Intervention |
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 | Intervention: stimulation elicits motor contraction |
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 | Study design: not an RCT |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: stimulation elicits motor contraction |
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 | Study design: not an RCT |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: acupuncture |
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 | Study outcomes: aims |
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 | Progress Report |
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 | Intervention |
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 | Intervention: acupuncture |
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 | Intervention: stimulation elicits motor contraction |
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 | Intervention: manipulating sensory input |
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 | Study design: not an RCT |
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 | Intervention |
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 | Study design: not an RCT |
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 | Intervention: mirror therapy |
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 | Intervention: robotic therapy |
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 | Intervention: robotic therapy |
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 | Intervention: mirror therapy |
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 | Intervention |
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 | Study design: not an RCT |
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 | Study design: not an RCT |
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 | Intervention: stimulation elicits motor contraction |
| 1. Sonde L, Kalimo H, Fernaeus S, Viitanen M. Low TENS treatment on post-stroke paretic arm: a three-year follow-up. Clinical Rehabilitation. 2000; 14(1):14-9.
 | Study outcomes: aims |
| 1. Song YB, Chun MH, Kim W, Lee SJ, Yi JH, Park DH. The effect of virtual reality and tetra-ataxiometric posturography programs on stroke patients with impaired standing balance. Annals of Rehabilitation Medicine. 2014; 38(2):160-6.
 | Intervention |
| 1. Sullivan J, Lopez-Rosado R. Sensory amplitude electrical stimulation improves gait speed in chronic stroke...2016 ACRM / American Congress of Rehabilitation Medicine Annual Conference Archives of Physical Medicine & Rehabilitation 2016; 97(10):27.
 | Study design: not an RCT |
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 | Intervention: stimulation elicits motor contraction |
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