Supplementary Material 19: Characteristics of ongoing studies

Caen 2021 [1]	
Study name	REEDUCATION OF OLFACTORY DISORDERS AFTER A CEREBRAL VASCULAR ACCIDENT IN ADULTS (RE-OLF)
Methods	RCT
Participants	Inclusion Criteria: • Adult patient under 65 in order to avoid presbyosmia bias, • Patient suffering from an ischemic and / or hemorrhagic stroke dating at least 3 months, • Patient followed in the SRH department and / or in post-stroke consultation, • French-speaking patient, • Patient affiliated to the social security scheme, • Patient having signed the informed consent. Exclusion Criteria: • Patient with a TDI score greater than 30.5 on the SST, • Patient with global aphasia: score <25 on the oral comprehension subtest of MT86 sentences (1), • Person under legal protection (guardianship, curatorship, safeguard of justice), • Patient treated with corticosteroids, corticosteroids, steroids, antihistamines and antibiotics which may have repercussions on olfaction, • History of trauma to the face, • History of ENT surgery, • Chronic rhinitis, • Infection of the ENT sphere in the 15 days preceding inclusion, • Neurodegenerative pathology, • Parosmia, phantosmia or cacosmia, • History of systemic chemotherapy or radiotherapy to the head.
Interventions	specific olfaction training, consisting of smelling 4 scents twice a day using scent sticks, for 12 weeks.
Outcomes	TDI score obtained in SST after the training period (12 weeks) Score obtained on the ASOF quality of life questionnaire modified after training (12 weeks) T, D and I sub-scores obtained in SST after training (12 weeks) Number of complaints about side effects and possible discomfort related to training Number of training stops (training < 12 weeks) score obtained in the SST after training (12 weeks) TDI score obtained at SST 3 months after the end of training (at 24 weeks) Percentage of patients changing category according to the thresholds validated by the SST (anosmia, hyposmia, normosmia).

Starting date	September 1, 2021
Contact information	none provided
Notes	
Dukelow 2019 [2]	
Study name	Robot and tDCS Based Proprioceptive Rehabilitation After Stroke (RoboStim)
Methods	Randomised Clinical Trial
Participants	Inclusion Criteria: Sex - Both male and female Age: 18 years and older Stroke onset: >6 months prior to enrolment Stroke type: Hemorrhagic and ischaemic Evidence of proprioceptive deficits as determined by a robotic assessment Ability to follow simple 3-step commands Exclusion Criteria: Other co-morbid neurologic diagnoses (eg. Parkinson's disease) Seizure disorder Enrolment in concurrent upper extremity intervention trial Metal implants in head significant upper extremity orthopedic issues
Interventions	Robotic Rehabilitation plus 1x1 anodal tDCS Receive 10 days of 1hr robotic rehabilitation with the KINARM Exoskeleton, in addition to 20 minutes, 2mA anodal tDCS (Soterix 1x1 tDCS) over the ipsilesional sensory cortex during the first 20 minutes of each robotic session. Current is ramped up to 2mA over 30 seconds and ramped back down over 30 seconds at the end of the 20 minutes.
Outcomes	Robotic limb position matching standardized score Robotic kinaesthesia standardized score Change in Upper-Extremity Fugl-Meyer Assessment scores Change in Nottingham Sensory Assessment scores Change in Functional Independence Measure score) tDCS Tolerability Attention/Motivation Questionnaire
Starting date	March 6, 2018
Contact information	matthew.chilvers@ucalgary.ca https://clinicaltrials.gov/ct2/show/NCT03888326 Responsible party: Dr. Sean Dukelow, University of Calgary
Notes	
Gorsler 2020 [3]	

Study name	Effects of end-effector controlled gait training compared to balance training on postural stability, walking ability and subjective perception of visual verticality (SVV) in non-ambulatory patients with left-sided neglect
Methods	Randomized controlled trial
Participants	Inclusion Criteria: - Ischemic or hemorrhagic right hemispheric stroke (confirmed by imaging); - early subacute phase (7-80 days after stroke); - age = 18 years; - presence of visual-spatial neglect; - Walking ability: Functional Ambulation Categories (FAC) 0-2; -ability for aided standing for 15 min under stable cardiavascular conditions; - SSV> 2 °; - ability to comprehend or follow instructions and are willing and able to give consent
Interventions	Lyra-THERA Trainer vs THERA-Trainer standing and balance trainer
Outcomes	Functional Ambulation Categories
Starting date	25/06/2020
Contact information	Anna Gorsler Address: Paracelsusring 6A 14547 Beelitz-Heilstätten Germany Telephone:033204-22305 Email:gorsler@kliniken-beelitz.de Affiliation: Neurologische Rehabilitationsklinik Kliniken Beelitz
Notes	Trial registration details: DRKS00021654 Published protocol: none reported PPI: none reported
Joy 2018 [4]	
Study name	Immediate effect of ipsilesional head tilt on balance in patients with altered perception of verticality secondary to acute hemispheric stroke.
Methods	Randomized, Parallel Group, Placebo Controlled Trial
Participants	1. Adults with first ever hemispheric stroke (Medically diagnosed on the basis of radiological findings). 2. SVV deviation more than 30 to contralesional side. 3. Patients within 3 months post stroke with ability to comprehend and follow simple verbal instructions.
Interventions	Participants in experimental group will receive 10 minutes of intervention wherein they will be seated on chair/wheelchair and then their head will be passively tilted laterally to the side of the lesion at 60 degree by the therapist while patients looks straight. Control group will receive "No treatment".

Outcomes	Postural Assessment Scale for Stroke (PASS)
Starting date	24/01/2017
Contact information	ivanjoy67@gmail.com
Notes	after initial email contact with the author, we have been unable to clarify the current status of this study
Kim 2015 [5]	
Study name	https://clinicaltrials.gov/ct2/show/NCT02524015
Methods	RCT
Participants	Inclusion Criteria: Recent (within 2 months) unilateral stroke Burke Lateropulsion Scale ≥ 2 Age 21 to 89 years Ability to provide informed consent English-speaking Exclusion Criteria: Prior stroke within the past 6 months Cerebellar stroke Stroke-related brain imaging (MRI or CT) unavailable Global or receptive aphasia Prior documented neurologic disorder (e.g., multiple sclerosis, Parkinson's)
Interventions	novel physical therapy vs standard physical therapy
Outcomes	Burke Lateropulsion Scale
Starting date	September 2015
Contact information	Mary Kim, Assistant Professor, Residency Program Director, PM&R, Loma Linda University (no email given)
Notes	stated completion date July 2017, but unable to confirm this or find any further details
Lyon 2021 [6]	
Study name	Prismatic Adaptation for Rehabilitation of Postural Imbalance After Stroke (PEQUIE)
Methods	RCT
Participants	Inclusion Criteria: Adult, over 18 years old, and less than 80 years old Stroke right supratensorial,unilateral,haemorrhagic or ischemic, chronic (over 12 months) Ability to stay over 30 seconds in standing static position with open eyes and close eyes Show a postural imbalance, determined by a body weight bearing on right lower limb ≥ 60% during at least one posturographic evaluation with open eyes and that requires an inpatient rehabilitation

	Covered by a Health System where applicable, and/or in compliance with the recommendations of the national laws in force relating to biomedical research Free, enlightened and written consent of the patient Exclusion Criteria: Cerebellar lesion Brainstem lesion Bilateral cerebral lesion All orthopaedic or rheumatologic diseases, retinal visual impairments or other diseases interfering with assessments in accordance with the investigator's judgment Pregnancy or breast feeding Under an administrative or legal supervision
Interventions	Prismatic adaptation vs sham
Outcomes	Berg Balance Scale (BBS), static posturographic variables, Scale for Contraversive Pushing (SCP), Barthel index (BI), Location, size and Hindrance Modulates Oreintational Anistropy (HMOA)
Starting date	December 4, 2017
Contact information	Gilles RODE, gilles.rode@chu-lyon.fr
Notes	Need to determine if the intervention is for a perceptual disorder or a postural one.
Mazer 2009 [7]	
Study name	
Methods	
Participants	
Interventions	
Outcomes	
Starting date	
Contact information	
Notes	Personal communication with Mazer in 2009 for her included study (Mazer 2003) revealed she has a relevant ongoing study; in 2021 there was no reply to an email to provide more information on this study
Parc Sanitari Pere Virgili 2019 [8]	
Study name	Effectiveness of Balance Exercise Program for Stroke Patients With Pusher Syndrome
Methods	Randomized clinical trial
Participants	Inclusion Criteria: Patients ≥18 years admitted to an intermediate care unit after suffering from subacute stroke, for functional recovery.

	Diagnosis of ischemic or hemorrhagic stroke confirmed by Magnetic Resonance Imaging (MRI) or Computed Tomography (CT) scan. Pusher syndrome identified by the Scale for Contraversive Pushing (SCP) with a score of ≥2 and by Burke Lateropulsion Scale (BLS) with a value of ≥3. Exclusion Criteria: Patients with severe previous functional dependence (Barthel Index ≤60) Patients diagnosed with dementia GDS-4 or previous severe cognitive impairment. Patients diagnosed with delirium. Patients diagnosed with Wernicke's aphasia. Patients with a previous severe visual deficit that prevents them from continuing activity (retinopathy, cataracts, etc.) Patient with a history of other causes of balance impairment. Patients with orthopedic conditions that difficult the performance of the proposed rehabilitation treatment. Patients enrolled in other research studies.
Interventions	Core stability and feedback visual laser exercises vs Control
Outcomes	Scale for Contraversive Pushing Burke Lateropulsion Scale Balance (S-PASS) Newcastle Stroke-Specific Quality of Life Measure (NEWSQOL) Barthel index
Starting date	November 20, 2018
Contact information	no author information provided
Notes	
Perennou 2021 [9]	
Study name	VIrtual Reality Glasses Use to Improve Lateropulsion and the Post-stroke Postural Vertical
Methods	Randomised crossover study
Participants	Inclusion Criteria: 20 stroke participants Hospitalized in neurorehabilitation Hemisphere stroke (Right or left) Stroke delay < 6 months Presence of lateropulsion assessed by the Scale for Contraversive Pushing (SCP) > 0.5 20 healthy participants No history of stroke or others neurological pathologies No balance disorders No history of vestibular or dizziness disorders Exclusion Criteria: All History of psychiatric disorders

	Nyctophobia Advanced heart failure Severe trunk deformation with C7 lateral > 30 mm due to an independent cause beyond the stroke (i.e., scoliosis) or history of postural disorder 20 Stroke participants Medical instability making the assessment impossible Comprehension deficits with Boston Diagnostic Aphasia Examination gravity score ≥3 History of vestibular or dizziness disorders No previous neurological history interfering with balance Inability to understand and execute simple orders Severe untreated depression (Aphasic Depression Rating Scale (ADRS) score >15)
Interventions	Virtual Reality Glasses
Outcomes	Changes in the postural perception of the vertical (PV) Changes in the visual perception of the vertical Post-effect on PV. Post-effect on VV. Modulation of active vertical trunk orientation Modulation of active vertical head orientation Effect on lateropulsion Effect on postural capacities Responders to virtual reality. Changes in weight-bearing asymmetry. Awareness of the changes in active vertical body orientation. Relationship between the trunk tilt y. Relationship between the trunk tilt Quantification of a possible Virtual reality sickness Description of symptoms in case of Virtual reality sickness.
Starting date	June 15, 2021
Contact information	DPerennou@chu-grenoble.fr
Notes	
Reinkensmeyer 2021 [10]	
Study name	Determinants of the Effectiveness of Robot-assisted Hand Movement Training
Methods	Randomized single-blinded trial
Participants	Inclusion Criteria: Age 18 to 85 years Suffered from a single ischemic stroke (radiologically confirmed) at least 6-months prior to enrollment An ability to score at least 3 blocks on the Box and Block Test Exclusion Criteria: A substantial decrease in alertness, language reception or attention

	Pregnant or lactating Advanced liver, kidney, cardiac or pulmonary disease Plan to alter any current participation in other rehabilitation therapy in the time period of the study A terminal medical diagnosis consistent with survival < 1 year Coexistent major neurological disease Coexistent major psychiatric disease A history of significant alcohol or drug abuse in the prior 3 years Current enrollment in another study related to stroke or stroke recovery Any other medical contraindication to participation in this study evaluated by our team physician.
Interventions	FINGER robotic training - FINGER exoskeleton is a robotic device that can provide assistance and resistance to thumb and finger movement
Outcomes	Box and Blocks Test . Fugl-Meyer Motor Assessment of the Upper Extremity Motor Activity Log Changes in finger proprioception measured using the Crisscross Assessment
Starting date	July 2021
Contact information	vchan2@uci.edu
Notes	Clinical trial: NCT04818073
Sidarta 2020 [11]	
Study name	Active Somatosensory Exercise for Chronic Stroke (ActSens)
Methods	RCT
Participants	Inclusion Criteria: First-time ischemic or haemorrhagic stroke survivors; Patients of at least 6-month post-stroke; Patients with severe to moderate sensory impairment as assessed by Erasmus Nottingham Sensory Assessment (each category ≤ 6/8); Patients with arm motor impairment, shoulder abduction and elbow extension Medical Research Council (MRC) motor power grade 3-5; Exclusion Criteria: Patients with bilateral impairment; Patients with high upper-limb spasticity (Ashworth scale > 2); Patients with unilateral neglect as assessed by Star Cancellation Test (score < 44); Patients with cognitive impairment as assessed by a 2-step instructions from the modified Mini Mental State Examination; Patients with known history of mental disorders; Patients with the inability to perform upper arm activity due to excessive pain
Interventions	Active somatosensory training group vs Active somatosensory training
Outcomes	Change in motor behavioral scores, Change in somatosensory acuity,

	Fugl-Meyer Assessment for Upper Extremity, Wolf Motor Function Test (WMFT), Erasmus-MC version of the Nottingham Sensory Assessment (EmNSA)
Starting date	March 1, 2021
Contact information	Ananda Sidarta, PhD ananda.sidarta@ntu.edu.sg
Notes	

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