XV Riunione Annuale Network Cochrane Italiano

Workshop

Evidenze dell'esercizio fisico a lungo termine nell'ictus: limiti, potenzialità e indicazioni per la futura ricerca

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Contenuti

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- Buone prove di efficacia su esercizio a lungo termine ….. poco trasferimento nella pratica ?
- Quali prove (fisioterapia e esercizio) da RCT a Linee Guida
- Quali ostacoli alla diffusione dell' esercizio negli anziani disabili… nonostante le prove…..
- Su che cosa fare ricerca o indagare…

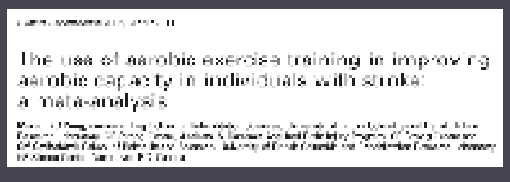
Efficacia dell'esercizio fisico

3

Pang MY, Eng JJ, Dawson AS, McKay HA, Harris JE.

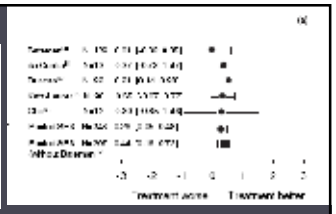
A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial.

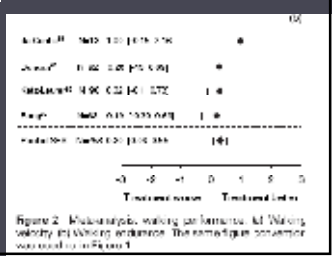
J Am Geriatr Soc. 2005 Oct;53(10):1667-74.


The use of aerobic exercise training in improving aerobic capacity in individuals with stroke: A meta-analysis


Clinical messages

- Thus far, evidence to support the use of aerobic exercise to improve aerobic capacity in individuals with stroke.
- The results can be generalized to those who are mildly or moderately impaired by stroke and who have relatively low risk of cardiac complications with exercise.



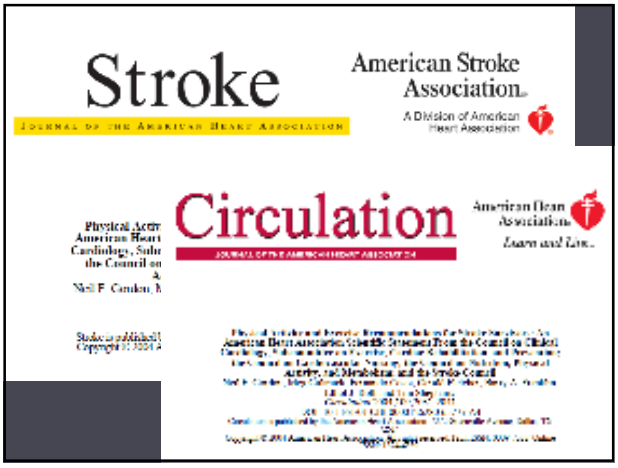


Limiti

- Mancanza di follow up a lungo termine ecc.

Commento

- Scarso trasferimento nella pratica clinica (anche durante le sedute di fisioterapia l'esercizio è molto al di sotto degli standard per un training aerobico *MacKay-Lyons 2002*)



Physical fitness training for stroke patients

- 19 revisioni sistematiche
- 196 studi rilevanti (96 non includibili, 58 non classificabili, 19 ancora in corso)
- 23 studi inclusi con 24 comparazioni
- 1147 pazienti (da 9 giorni a 8 anni dall'esordio)
- Tre tipi di training (cardiorespiratorio, cammino, forza)

Physical fitness training for stroke patients

- Il training cardiorespiratorio (cammino) è efficace nell' aumentare la velocità del passo, la resistenza e nel ridurre la dipendenza
- La maggior parte dei benefici in termini di mobilità e funzioni fisiche sembra essere associato ad un "task-related training"
- Non ci sono prove che migliori la disabilità

Physical fitness training for stroke patients

Limiti ed indicazioni per la ricerca

- Valutare esiti a lungo termine (follow up 3-6 m)
- Specificare meglio il trattamento
- Problema del gruppo di controllo (anche ADL hanno effetto training)
- Studiare strategie per il mantenimento dell'esercizio a lungo termine

Repetitive task training for improving functional ability after stroke

- 14 RCT con 659 pazienti
- Il training è efficace nel migliorare la velocità la resistenza nel cammino, la capacità di "alzarsi-sedersi" e le ADL ma i risultati non sono mantenuti nel controllo a 6 mesi.
- Nessun effetto sulla funzione dell'arto superiore né sulla QdV

Repetitive task training for improving functional ability after stroke

Limiti ed indicazioni per la ricerca

- Includere effetti avversi e outcome di QdV
- Valutare in modo pragmatico i diversi tipi di training offerti e la loro accettabilità (es. di gruppo, nella comunità ecc.)
- Studiare strategie per il mantenimento dell'esercizio a lungo termine

J Neurol Neurosurg Psychiatry. 2010 Sep 8. [Epub ahead of print]

Efficacy of physiotherapy interventions late after stroke: a meta-analysis.

Ferrarello F, Baccini M, Rinaldi LA, Cavallini MC, Mossello E, Masotti G, Marchionni N, Di Bari M.
Unit of Functional Rehabilitation, Prato, Italy.

Abstract

Objective Physiotherapy is usually provided only in the first few months after stroke, while its effectiveness and appropriateness in the chronic phase are uncertain. The authors conducted a systematic review and meta-analysis of randomised clinical trials (RCT) to evaluate the efficacy of physiotherapy interventions on motor and functional outcomes late after stroke. Methods The authors searched published studies where participants were randomised to an active physiotherapy intervention, compared with placebo or no intervention, at least 6 months after stroke. The outcome was a change in mobility and activities of daily living (ADL) independence. The quality of the trials was evaluated using the PEDro scale. Findings were summarised across studies as effect size (ES) or, whenever possible, weighted mean difference (WMD) with 95% CI in random effects models. Results Fifteen RCT were included, enrolling 700 participants with follow-up data. The meta-analysis of primary outcomes from the original studies showed a significant effect of the intervention (ES 0.29, 95% CI 0.14 to 0.45). The efficacy of the intervention was particularly evident when short- and long-distance walking were considered as separate outcomes, with WMD of 0.05 m/s (95% CI 0.008 to 0.088) and 20 m (95% CI 3.6 to 36.0), respectively. Also, ADL improvement was greater, though non-significantly, in the intervention group. No significant heterogeneity was found. Interpretation A variety of physiotherapy interventions improve functional outcomes, even when applied late after stroke. These findings challenge the concept of a plateau in functional recovery of patients who had experienced stroke and should be valued in planning community rehabilitation services.

Circuit class therapy for improving mobility after stroke

Revisione sistematica

Wevers L, van de Port I, Vermue M, Mead G, Kwakkel G.

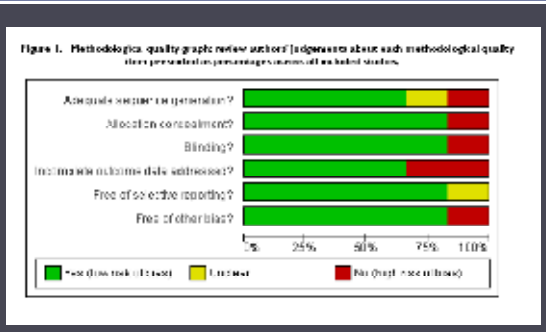
Effects of a task-oriented circuit class training on walking competency after stroke.

Stroke 2009;40:2450–9

Circuit class therapy for improving mobility after stroke

- 6 trial (dal 2000 al 2009), totale 292 soggetti
- In 2 studi I soggetti erano a 3 mesi dall'ictus (intervento in ospedale), negli altri oltre 1 anno e fino a 5 anni (intervento nella comunità)
- Requisito minimo : alzarsi con minimo aiuto e camminare almeno 10 metri anche con aiuto

Qualità metodologica degli studi



Circuit class therapy for improving mobility after stroke

The circuit classes were more effective in improving the person's ability to walk further, longer or faster and to balance more easily and confidently when compared to other types of exercise. Intensity can vary from daily to three times weekly for four weeks or more to achieve benefits. There is evidence that it can reduce length of stay in the inpatient setting. There was insufficient evidence to determine the effect on adverse events (e.g. falls).

Future studies should include measures of cost/benefits as well as quality of life and participation.

Int J Rehabil Res. 2005 Mar;28(1):17-23.

Exercise training to improve motor performance in chronic stroke: effects of a community-based exercise program.

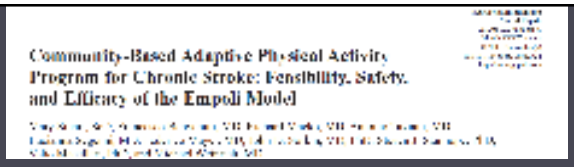
Leroux A

Department of Exercise Science, Concordia University and Centre de Recherche Interdisciplinaire en Réadaptation du Montréal Métropolitain Site, Constance-Lethbridge Rehabilitation Centre, Montréal, Canada. alerou@alcor.concordia.ca

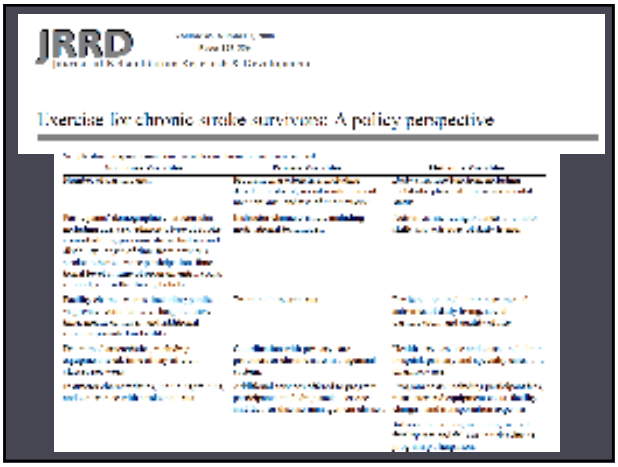
Abstract

The purpose of this study was to investigate the feasibility and efficacy of an exercise program offered by a community organization on motor performance in individuals with chronic stroke. Twenty hemiparetic individuals at least 6 months after a stroke and discharged from all rehabilitation services enrolled in the study. They took part in an 8-week group program (two times per week) aimed at improving balance, mobility, coordination, walking endurance and strength on the hemiparetic side through various functional exercises. Pre- and post-exercise assessments included the stroke impairment assessment set, the Berg balance scale, the step test, the timed-up-and-go and the 6 min walk. Results showed significant improvements (P<0.008) in all of the above tests, excluding the 6 min walk, after completion of the exercise training. Correlation analyses revealed that the individuals' age and time since injury were poorly related to the improvement in performance. It is concluded that an exercise program offered by a community organization can lead to improvement in motor performance of individuals with chronic stroke. To prevent decline in motor performance, community-based exercise programs should thus be made available for stroke patients discharged from rehabilitation services.

- Studio pilota su 20 pazienti (prima-dopo)
- Miglioramento significato di mobilità (velocità cammino, equilibrio ecc.), autonomia nelle ADL ma non EADL.
- Migliorano in modo modesto depressione e indicatori di QdV



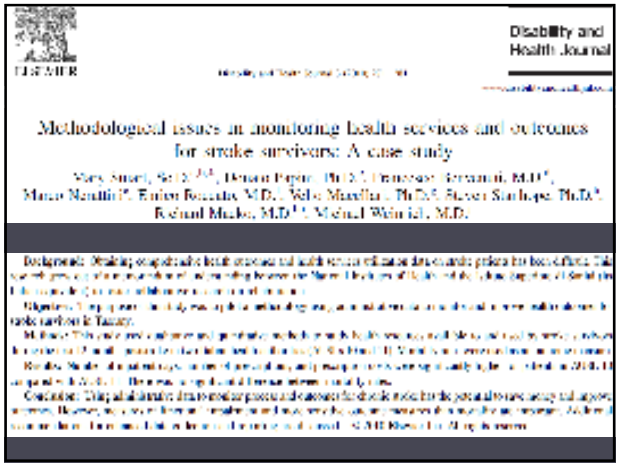
- Studio controllato non randomizzato (49 AUSL 11 vs 44 AUSL 10)
- A 6 mesi il gruppo trattato migliora la velocità del cammino, equilibrio, mobilità globale e partecipazione (SIS) mentre il gruppo di controllo declina
- Nel gruppo trattato migliora la depressione, nel gruppo di controllo rimane invariata



Community Exercise: A Vital Component to Healthy Aging

Barriere

- Personal variables showing strong correlation with exercise participation : individual's self-efficacy beliefs, outcome expectations, families support and perceived social support for exercise.
- At the community level, the financial and physical accessibility of exercise programs can moderate exercise behaviours :
  - Exercise costs are frequently reported as obstacles to exercise participation
  - Lack of safe exercise settings
  - Transportation issues, which range from difficulty entering or exiting one's home to unreliable bus service


Disability and Health Journal

Methodological issues in monitoring health services and outcomes for stroke survivors: A case study

Riflessioni sulla ricerca

- Il disegno dello studio, la numerosità del campione e la qualità metodologica
- La misura degli outcome e il timing (carenti misure di partecipazione, QdV, eventi avversi, uso delle risorse sanitarie, rapporto costi-benefici, ri-ospedalizzazioni ecc.)
- La standardizzazione del trattamento e del controllo (non è sufficiente *usual care*)
- Concentrarsi di piu' sulla fase "cronica"


The Virtual International Stroke Trials Archive

http://stroke.ahajournals.org/cgi/content/full/38/6/1905

VISTA-Rehab: A resource for stroke rehabilitation trials.

Ali M, Ashburn A, Bowen A, Brodie E, Corr S, Drummond A, Edmans J, Gladman J, Kalra L, Langhorne P, Lees KR, Lincoln N, Logan P, Mead G, Patchick E, Pollock A, Pomeroy V, Sackley C, Sunnerhagen KS, Van Vliet P, Walker M, Brady M; on behalf of the VISTA-Rehab Investigators.

Int J Stroke. 2010 Dec;5(6):447-452. doi: 10

Riflessioni finali

- Ci sono prove di buona qualità della efficacia dell'esercizio nel prevenire l'ictus, controllare i fattori di rischio e migliorare gli outcome a lungo termine (in qualsiasi momento della storia naturale).
- Non ci sono associazioni tra esercizio e riduzione di recidiva o mortalità.
- L'impegno maggiore dovrebbe essere dato alle politiche e strategie per superare le barriere e promuovere l'esercizio adattato a lungo termine
- La ricerca dovrebbe comprendere anche studi di monitoraggio dei processi e degli outcome a livello di popolazione