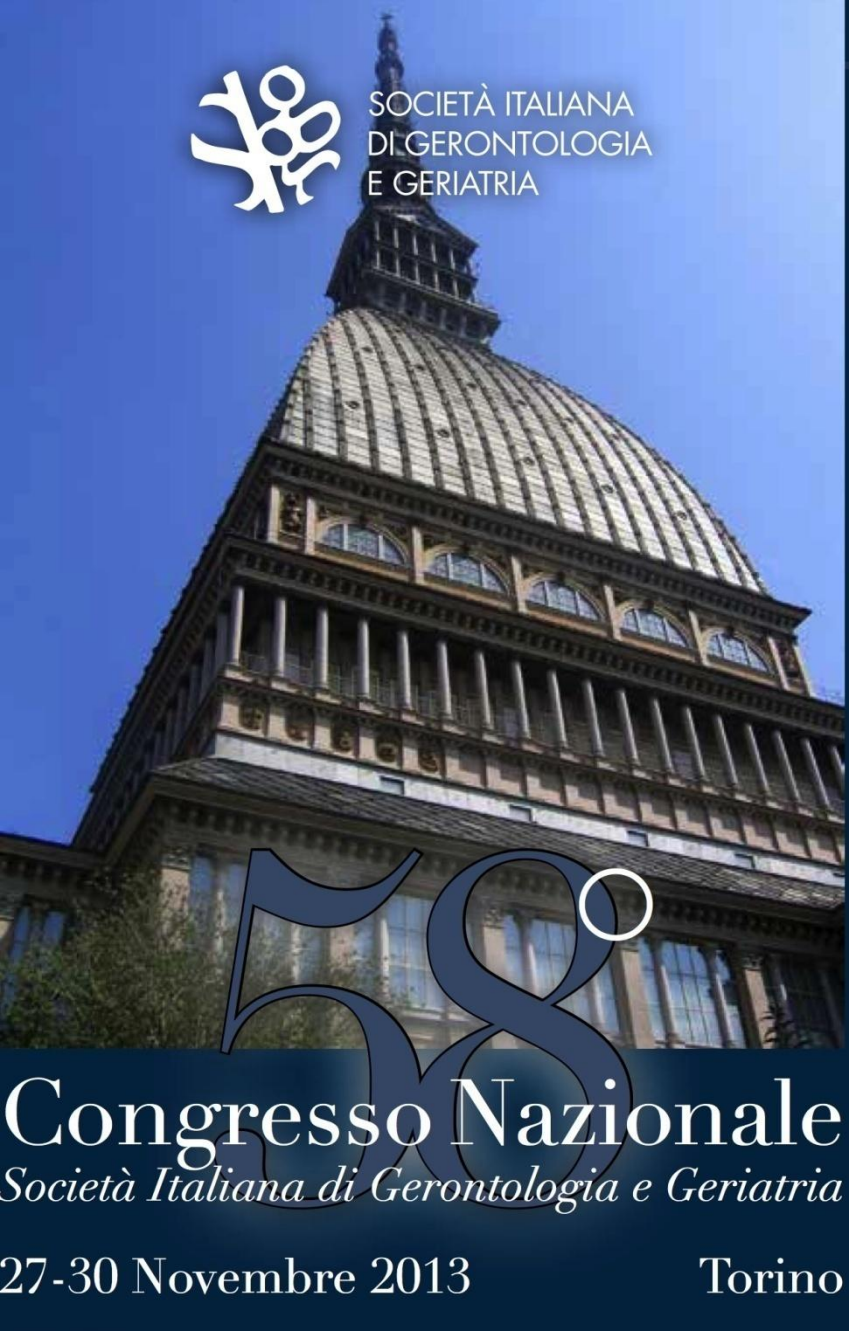


Simposio SIGG-AIP
Gruppo di Studio sull'Ortogeriatria (GIOG)

L'ORTOGERIATRIA: UNA SFIDA PER IL PRESENTE,
UN'OPPORTUNITÀ PER IL FUTURO

La continuità riabilitativa

A. Barone

E.O. Ospedale Galliera-Genova

SOCIETÀ ITALIANA DI GERONTOLOGIA E GERIATRIA

GIOG

ASSOCIAZIONE ITALIANA PSICOGERIATRIA

Requisiti di un modello di intervento ortogeriatrico

Requisito	Standard dell'intervento
Responsabilità gestionale	• Cogestione ortopedico-geriatrica • Team multidisciplinare nelle varie fasi del percorso
Profilo e compiti dell'ortogeriatra	• Esperienza comprovata nella valutazione multidimensionale e nella gestione del paziente anziano acuto, con particolari competenze sulle sindromi geriatriche • Esperienza comprovata nella gestione dei problemi medici perioperatori e del delirium • Esperienza comprovata nella capacità di formulare una prognosi quoad vitam e quoad valetudinem e nel pianificare la prevenzione delle complicanze in base ai profili di rischio dei pazienti • Esperienza nella diagnosi e nel trattamento della patologia osteoporotica
Standardizzazione della comunicazione	• Descrizione delle procedure comunicate dei diversi professionisti • Definizione delle modalità di visita, breefing e meeting
Standardizzazione dell'intervento	• Sviluppo di protocolli condivisi basati sulle evidenze disponibili sui principali aspetti del perioperatorio
Rapidità di intervento chirurgico	• Riduzione del trattamento conservativo al di sotto del 4% dei pazienti e con scelta condivisa dal team multidisciplinare • Condivisione di protocolli di ottimizzazione preoperatoria con anestesisisti ed ortopedici in base ai criteri dell'"urgenza differita" • Predisposizione di interventi organizzativi per evitare ritardi di intervento dovuti a fattori sistemici
Precocità nella mobilizzazione	• Intervento chirurgico orientato alla possibilità di carico completo immediato • Condivisione di protocolli di riabilitazione precoce con ortopedici, fisiatri/fisioterapisti • Realizzazione di protocolli per il trattamento del dolore, dell'anemia, prevenzione di ipovolemia postoperatoria e prevenzione e trattamento del delirium
Continuità assitenziale	• Discharge planning interdisciplinare precoce • Accesso all'intervento riabilitativo intra ed extraospedaliero secondo un piano di trattamento multidisciplinare, appropriato per tipologia ed intensità, in base alle potenzialità e alle condizioni prefrattura indipendentemente dal livello cognitivo, dalla sede di provenienza e dall'età del paziente.
Programma di prevenzione secondaria	• Valutazione in ogni paziente della patologia osteometabolica e del trattamento farmacologico indicato • Valutazione del rischio di caduta e definizione di un piano preventivo

Agenda

Programma riabilitativo

Setting

Approccio Multidisciplinare

Chi trattare

La riabilitazione prolungata

Agenda

Programma riabilitativo

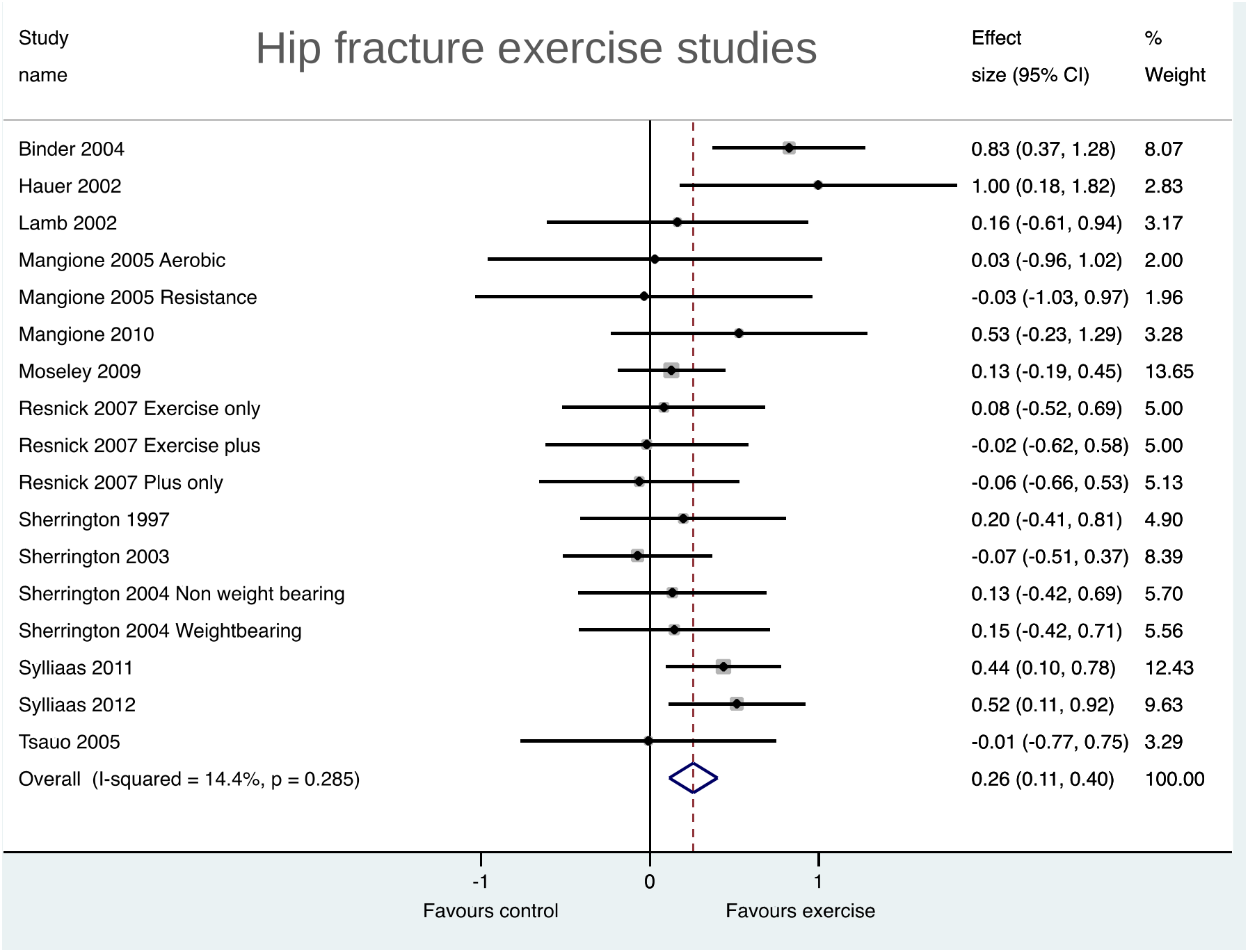
Setting

Approccio Multidisciplinare

Chi trattare

La riabilitazione prolungata

Hip fracture exercise studies



Agenda

Programma riabilitativo

Setting

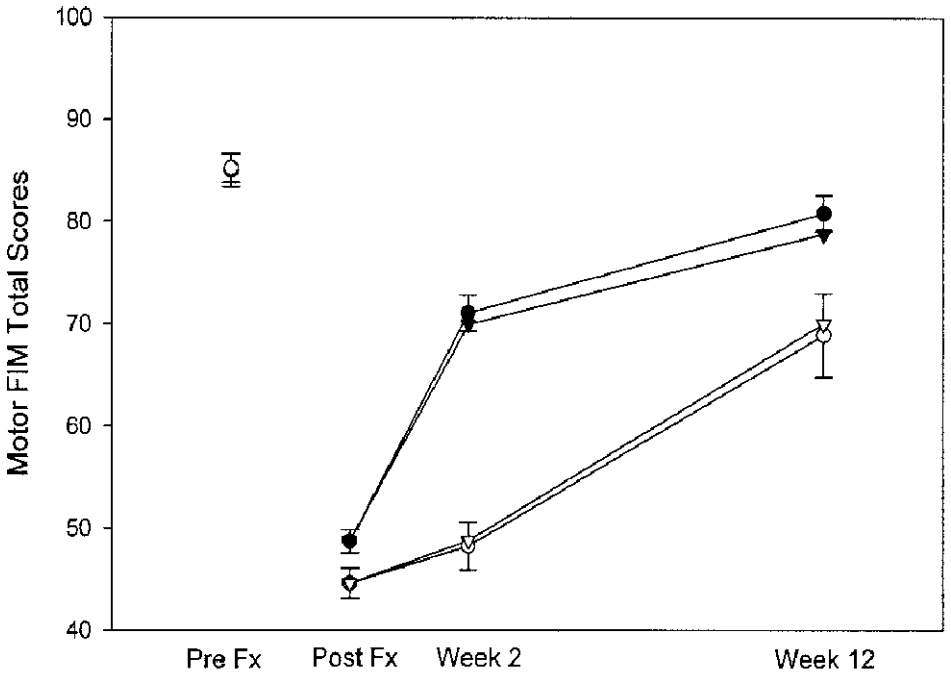
Approccio Multidisciplinare

Chi trattare

La riabilitazione prolungata

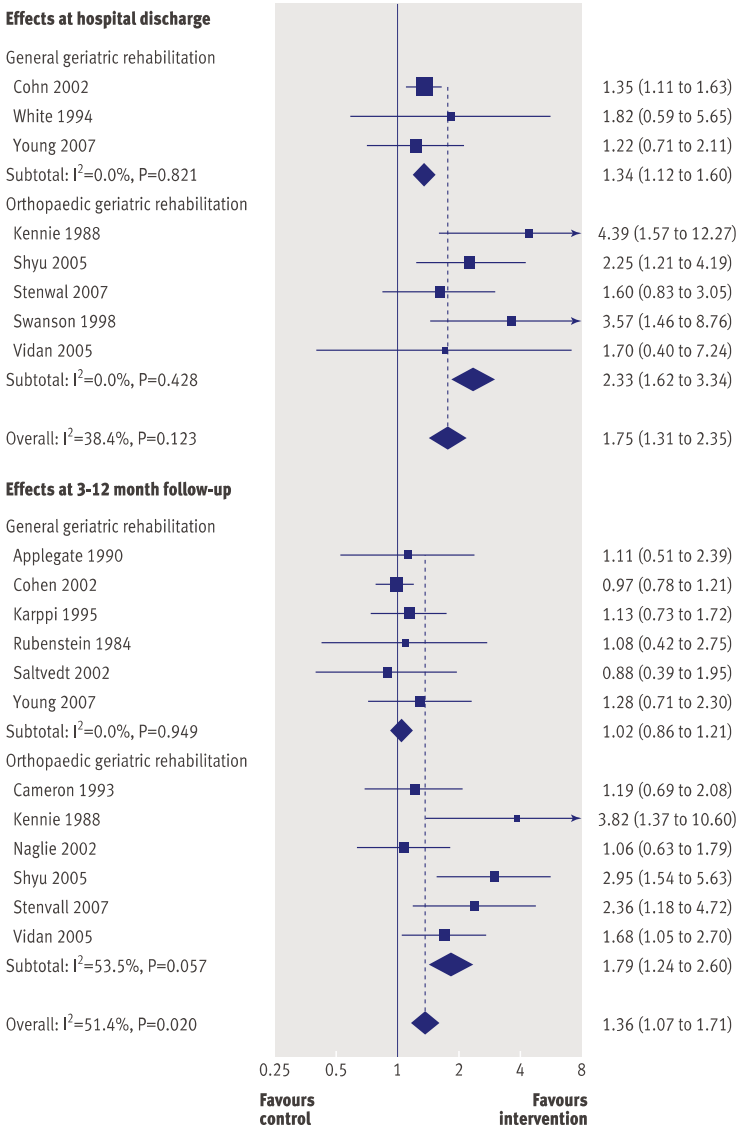
Effect of Rehabilitation Site on Functional Recovery After Hip Fracture

Inpatient rehabilitation (IRF) vs Skilled nursing facilities (SKF)
IRF 42 pts, age (y) 80 ± 8, female 83%
SNF 34 pts, age (y) 83 ± 9, female 79%



Munin, Arch Phys Med Rehabil, 2005

Inpatient rehabilitation specifically designed for geriatric patients: systematic review and meta-analysis of randomised controlled trials



Bachmann et al. BMJ 2010

Comparison of Discharge Functional Status After Rehabilitation in Skilled Nursing, Home Health, and Medical Rehabilitation Settings for Patients After Hip Fracture Repair

Trudy Mallinson, PhD, OTR/L,[a,b] Anne Deutsch, PhD, CRRN,[b,c,d,e]
Jillian Bateman, OTD, OTR/L,[d] Hsiang-Yi Tseng, MA, OTR/L,[d] Larry Manheim, PhD,[b,e]
Orit Almagor, MA,[b,e] Allen W. Heinemann, PhD, ABPP[b,d,e]

From the [a]Division of Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, CA; [b]Department of Physical Medicine and Rehabilitation, Feinberg School of Medicine, Northwestern University, Chicago, IL; [c]RTI International, Waltham, MA; [d]Rehabilitation Institute of Chicago, Chicago, IL; and [e]Center for Healthcare Studies, Northwestern University, Chicago, IL.

Abstract

Objective: To examine differences in rehabilitation outcomes across 3 post-acute care (PAC) rehabilitation settings for patients after hip fracture repair.

Design: Prospective, observational cohort study.

Setting: Six skilled nursing facilities (SNFs), 4 inpatient rehabilitation facilities (IRFs), and 8 home health agencies (HHAs) in 10 states.

Participants: Patients (N=181) receiving PAC rehabilitation following hip fracture with internal fixation (n=116) or total hip replacement (n=64), or no surgical intervention (n=1).

Interventions: Not applicable.

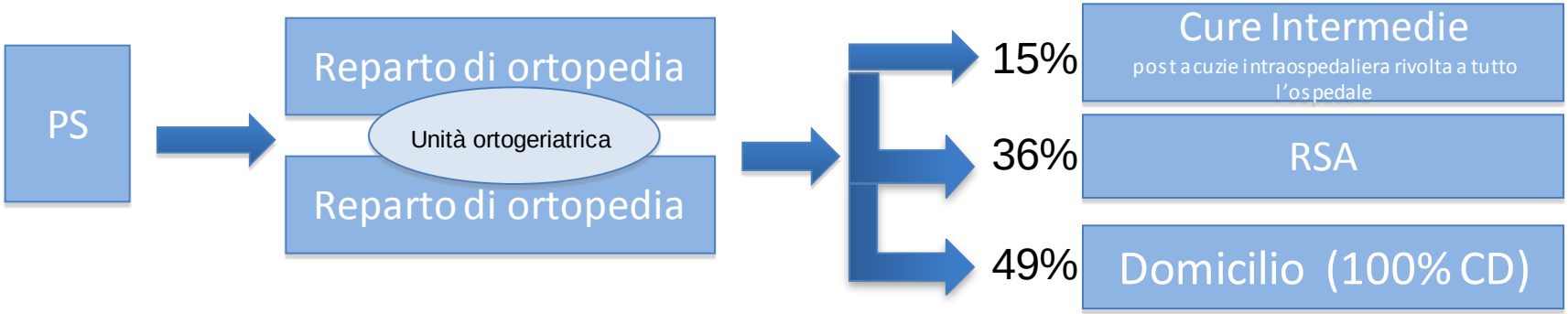
Main Outcome Measure: Self-care and mobility status at PAC discharge measured by the Inpatient Rehabilitation Facility Patient Assessment Instrument.

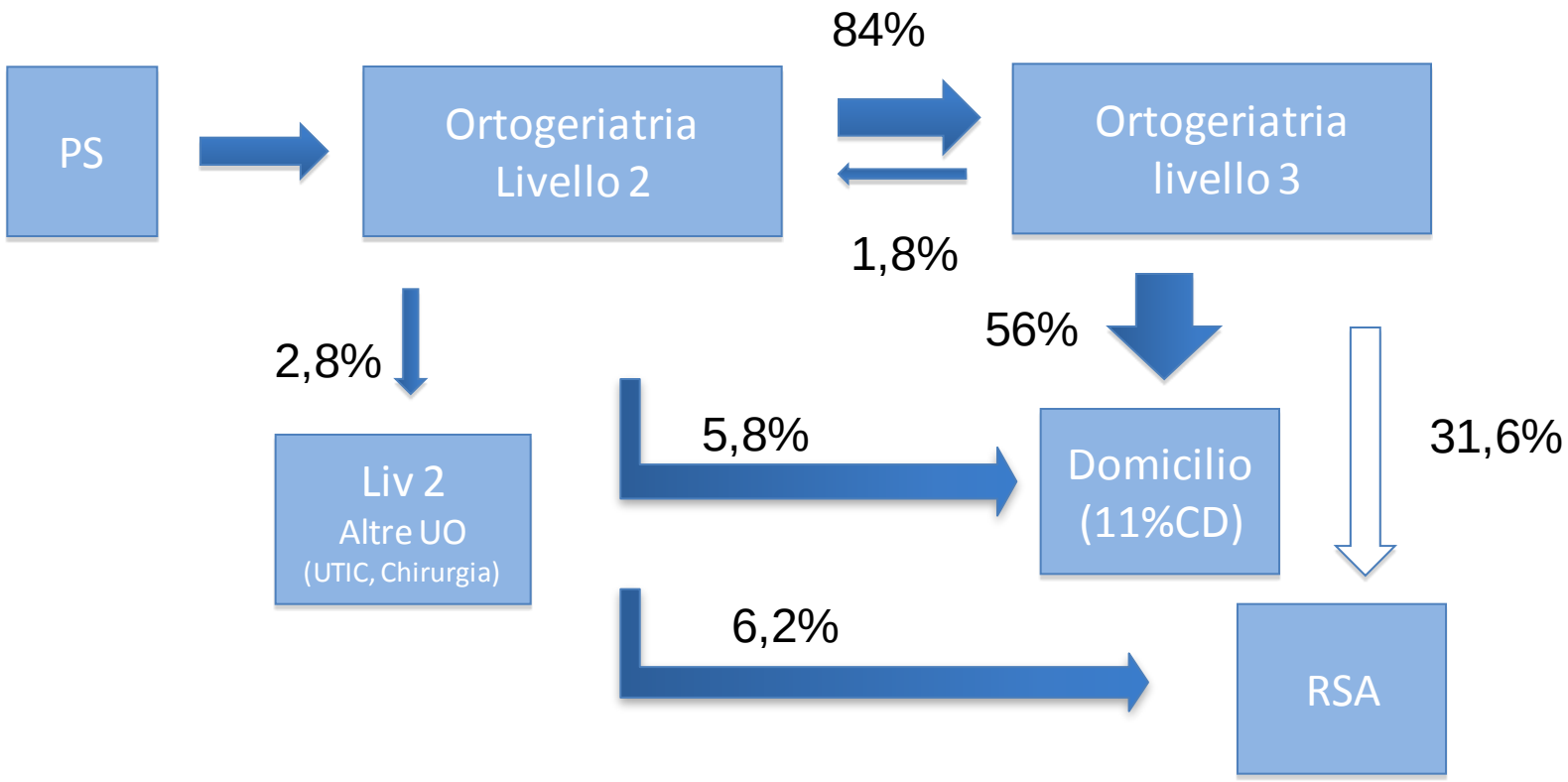
Results: IRF and HHA patients had lower self-care function at discharge relative to SNF patients controlling for patient characteristics, severity, comorbidities, and services. Adding length of stay (LOS) resulted in nonsignificant differences between IRFs and SNFs. In contrast, there was no setting-specific advantage in discharge mobility for patients with or without the addition of LOS. The average LOS of HHA patients was 2 weeks longer than that of SNF patients, whose average LOS was 9 days longer than that of IRF patients (average, 15d). IRF and SNF patients received about the same total minutes of therapy over their PAC stays (~2100min on average), whereas HHA patients received only approximately 25% as many minutes.

Conclusions: Setting-specific effects varied depending on whether self-care or mobility was the outcome of focus. It remains unclear to what extent rehabilitation intensity or natural recovery effects changes in functional status for patients with hip fracture. This study points to important directions for PAC setting comparative effectiveness studies in the future, including uniform measurement, limited consensus on factors affecting recovery, accounting for selection bias, and using end-point data collection that is at the same follow-up time periods for all settings.

Arch Physical Med Rehab 2013;

E.O. Ospedale Galliera: Modello Storico vs Intensità di Cura





Ortogeriatria per intensità di cure: dati di attività

	Controllo 2008	Ortogeriatria 2009-2010	Ortogeriatria 2012
Fr di femore (N°)	355	328	357
Età media	85.2	84	85 ± 7,8
Deg media livello chirurgico (Ortopedia/ livello 2)	18.1 gg	9,6 gg	9,2 gg
Deg media pre-operatoria (gg)	4,9	3,24	3
Deg. post-op per trasferimento in post acuzie (gg)	11 gg (Cure intermedie)	6,28 (livello 3)	5,8 (livello 3)
Mortalità			
Intraospedaliera	7%	3,3%	4,2%
A 30 giorni		6%	5,3%

Agenda

Programma riabilitativo

Setting

Approccio Multidisciplinare

Chi trattare

La riabilitazione prolungata

Guidelines and systematic reviews on multidisciplinary intervention after hip frature

Title	Recommendation/Finding	Level of evidence or number of trials
Evidence-based guidelines for the management of hip fractures in older persons: an update. Mak JCS *et al.*[25]	1. Early assisted ambulation (begun within 48 h of surgery) accelerates functional recovery and is associated with more direct discharges to home and less discharges to high-level care in previously community dwelling individuals	B[a]
	2. No particular mobilisation strategies can be recommended over others	A[a]
	3. Aerobic endurance exercise (upper body) may be integrated into standard rehabilitation to enhance patients' aerobic fitness and mobility after hip fracture surgery	B[a]
	4. A weight-bearing home exercise program improves balance and functional ability among older people who have completed usual care after a hip fracture	B[a]
Scottish Intercollegiate Guidelines Network (SIGN) 2009. Management of hip fracture in older people: a national clinical guideline [26]	"A multidisciplinary team should be used to facilitate the rehabilitation process"	B[b]
Cochrane review. Multidisciplinary rehabilitation for older people with hip fractures. Handoll HHG *et al.*[24]	"There was a tendency to a better overall result in patients receiving multidisciplinary inpatient rehabilitation but these results were not statistically significant"	13 RCTs, 2 498 participants
Systematic review of hip fracture rehabilitation practices in the elderly. Chudyk AM *et al.*[27]	"When looking across all of the intervention types, the most frequently reported positive outcomes were associated with measures of ambulatory ability"	30 RCTs and 25 nonrandomized trials
Cochrane review. Mobilisation strategies after hip fracture surgery in adults. Handoll HHG *et al.*[28]	"There is insufficient evidence from randomised trials to establish the effectiveness of the various mobilisation strategies used in rehabilitation after hip fracture surgery"	13 RCTs, 1 065 participants
Multi-disciplinary rehabilitation after hip fracture is associated with improved outcome: a systematic review. Halbert J *et al.*[29]	"This is the first review of randomized trials to demonstrate a benefit from multi-disciplinary rehabilitation; a 16% reduction in the pooled outcome combining death or admission to a nursing home"	11 RCTs, 2 177 participants

[a]Grades used A: body of evidence can be trusted to guide practice; B: body of evidence can be trusted to guide practice in most situations; [b]For details on grade allocation please see http://www.sign.ac.uk/guidelines/fulltext/50/annexb.html; RCT: randomized controlled trial.

Agenda

Programma riabilitativo

Setting

Approccio Multidisciplinare

Chi trattare

La riabilitazione prolungata

Outcomes for older adults in an inpatient rehabilitation facility following hip fracture (HF) surgery

Restrospective study
Two group: cognitively intact and CI (MMMSE<23)

Conclusion:… Older adults with CI showed functional gain comparable with that of older adults with intact cognition, in spite of the former's greater degree of functional dependence at baseline.

McGilton, Arch Gerontol Geriatrics 2009

Randomised, clinically controlled trial of intensive geriatric rehabilitation in patients with hip fracture: subgroup analysis of patients with dementia

RCT 245 indipendently living patients
Subanalysis of randomised intervention study

Intensive, multidisciplinary geriatric rehabilitation should be considered for hip fracture patients with mild or moderate dementia

Huusko, BMJ 2000

The Impact of Cognitive Impairment on Rehabilitation Outcomes in Elderly Patients Admitted with a Femoral Neck Fracture: A Systematic Review

-Eleven studies met the inclusion criteria.
Multiple rehabilitation settings in the acute and subacute phase postsurgery

CONCLUSION:
There is some evidence that older adults with cognitive impairment who receive intensive inpatient rehabilitation after surgical repair of a hip fracture may be able to gain comparable benefit in physical function as cognitively intact patients..

Muir S, J Geriatr Phys Therapy 2009

Agenda

Programma riabilitativo

Setting

Approccio Multidisciplinare

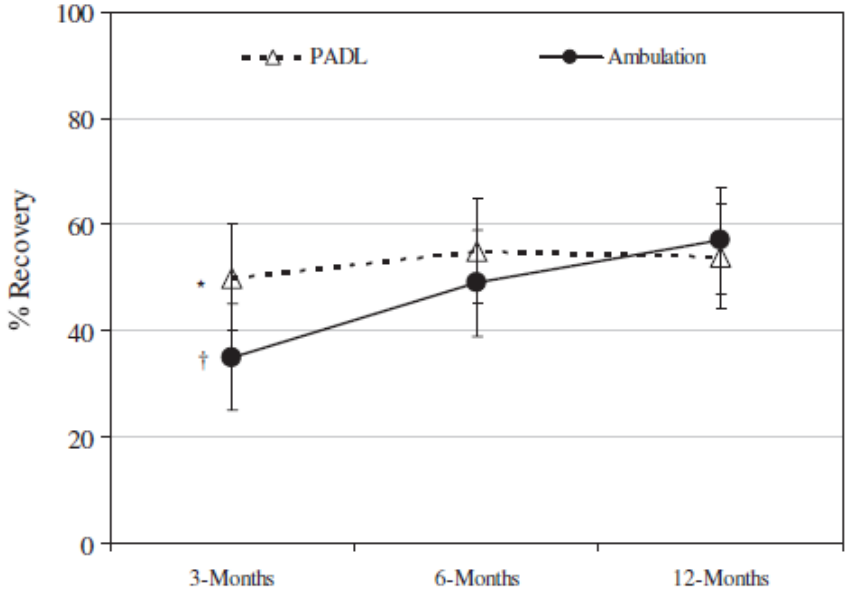
Chi trattare

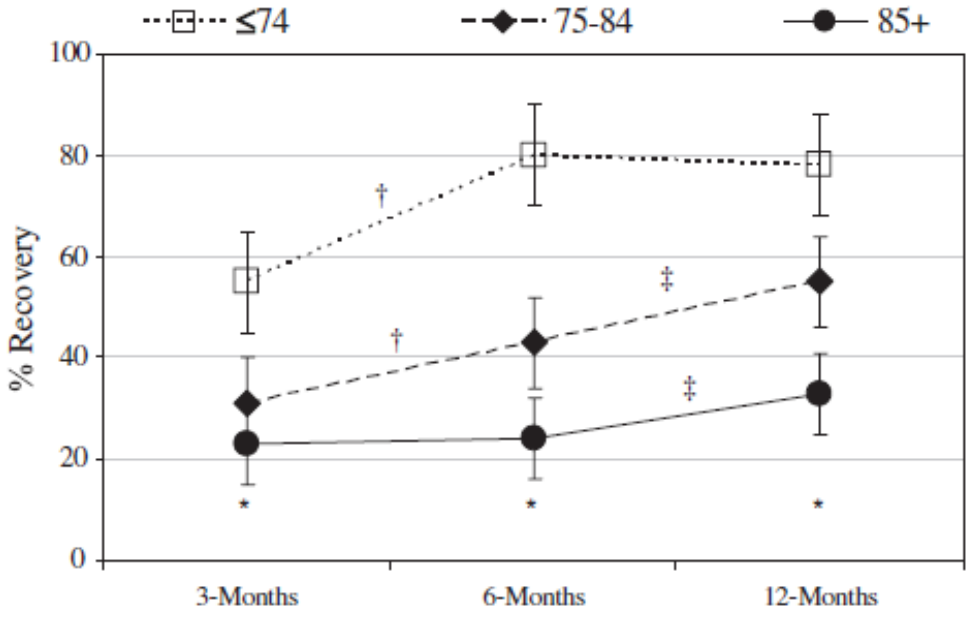
La riabilitazione prolungata

Pattern del recupero funzionale dopo la frattura di femore

Consecutive 1-year survivors aged ≥65 years (*n = 362)*
Age (y) 81 ± 7, Women 85%

Longitudinal changes in ambulation

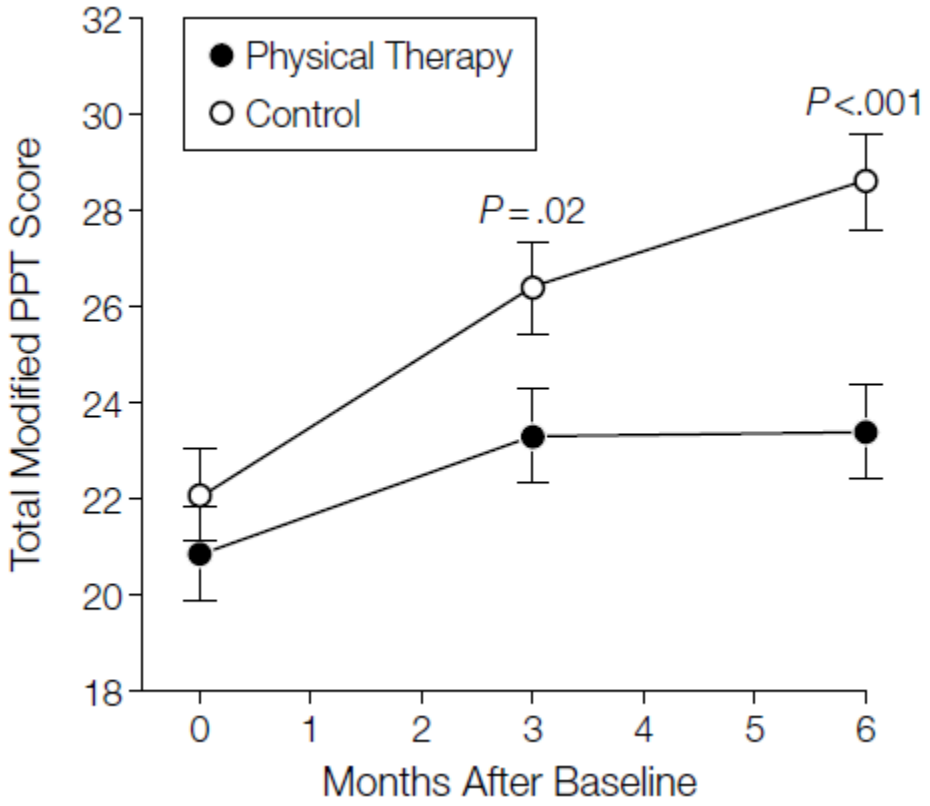




Ortiz-Alonso et al J Gerontol Med Sci 2012

Extended rehabilitation

90 soggetti dopo il completamento della riabilitazione standard (entro 16 settimane dell'intervento) residua difficoltà in 1 o più ADL
RCT
- Intervento: terapia fisica ad incremento progressivo (3 volte la settimana in piccoli gruppi all'interno di struttura riabilitativa) Durata complessiva circa 6 mesi
- Controllo: programma di esercizi da eseguire a domicilio fornito al paziente.



Binder et al JAMA, 2004

Extended rehabilitation

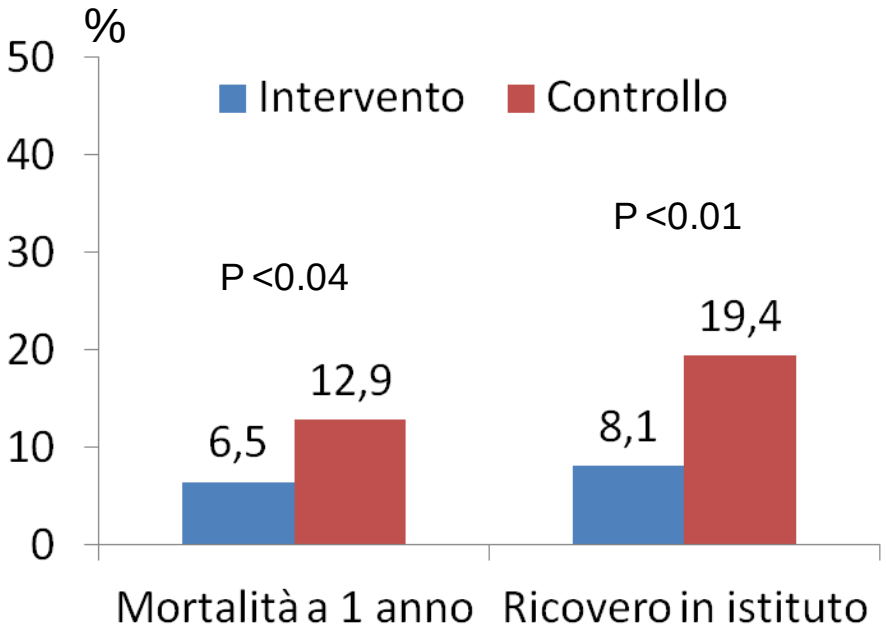
26 community-dwelling older adults 6 months after hip fracture
Randomized controlled pilot study
twice a week for 10 weeks for 20 total sessions
Intervention group: high-intensity leg strengthening exercises (30-40 min)
Control group: transcutaneous electrical nerve stimulation (TENS) and mental imagery

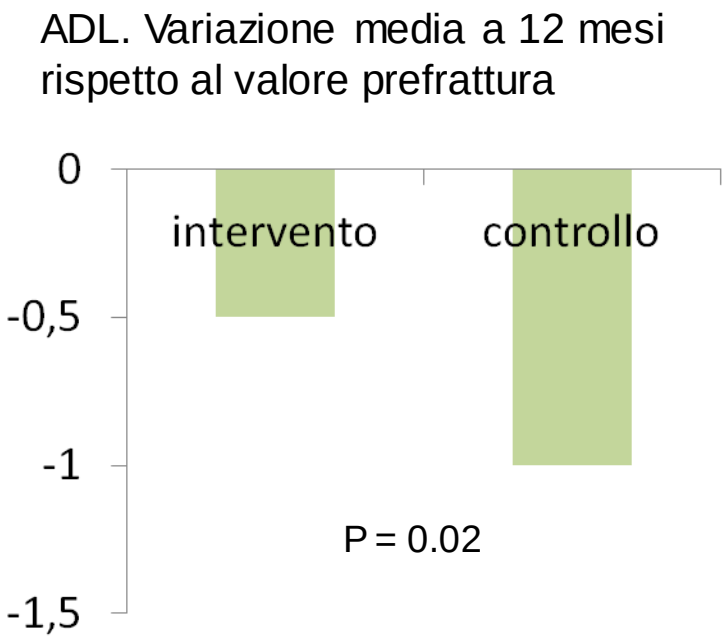
	Control Group	Exercise Group	P-Value
6-minute walk distance, m			
Baseline	221.8 ± 73.0	265.1 ± 88.5	
After intervention	242.7 ± 83.0	295.7 ± 79.8	.31
1 year after fracture	219.4 ± 67.8	299.5 ± 80.0	.005
Physical Performance Test , score			
Baseline	20.4 ± 6.1	24.0 ± 3.5	
After intervention	21.3 ± 5.8	27.4 ± 3.2	.02
1 year after fracture	20.3 ± 6.2	27.6 ± 2.6	<.001

Mangione et al J Am Ger Soc, 2010

Extended rehabilitation

124 soggetti operati per frattura di femore dopo la riabilitazione standard
RCT
- Intervento: terapia fisica ad incremento progressivo (2 volte la settimana in strutture riabilitative) per 12 mesi. Controllo telefonico mensile più visita geriatrica mensile
- Controllo. Terapia standard compreso l'intervento ortogeriatrico in fase acuta, la riabilitazione standard e interventi successivi se richiesti.



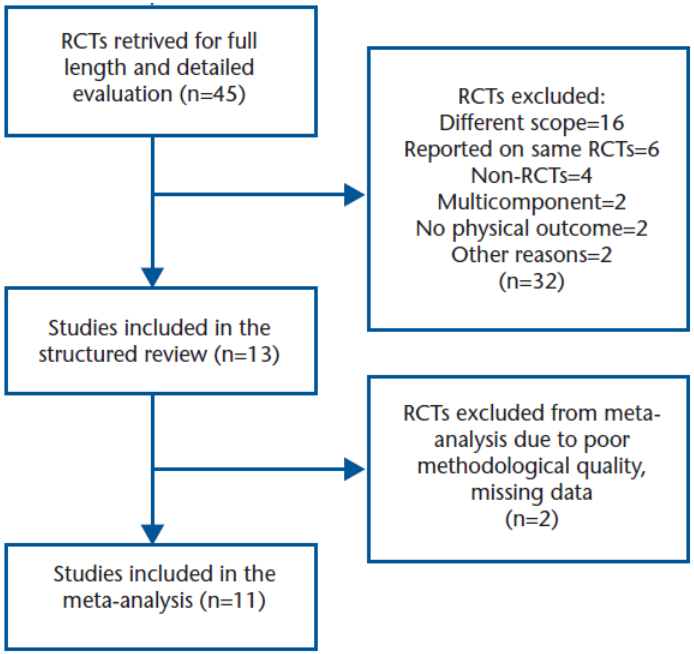


Singh et al JAMDA 2012

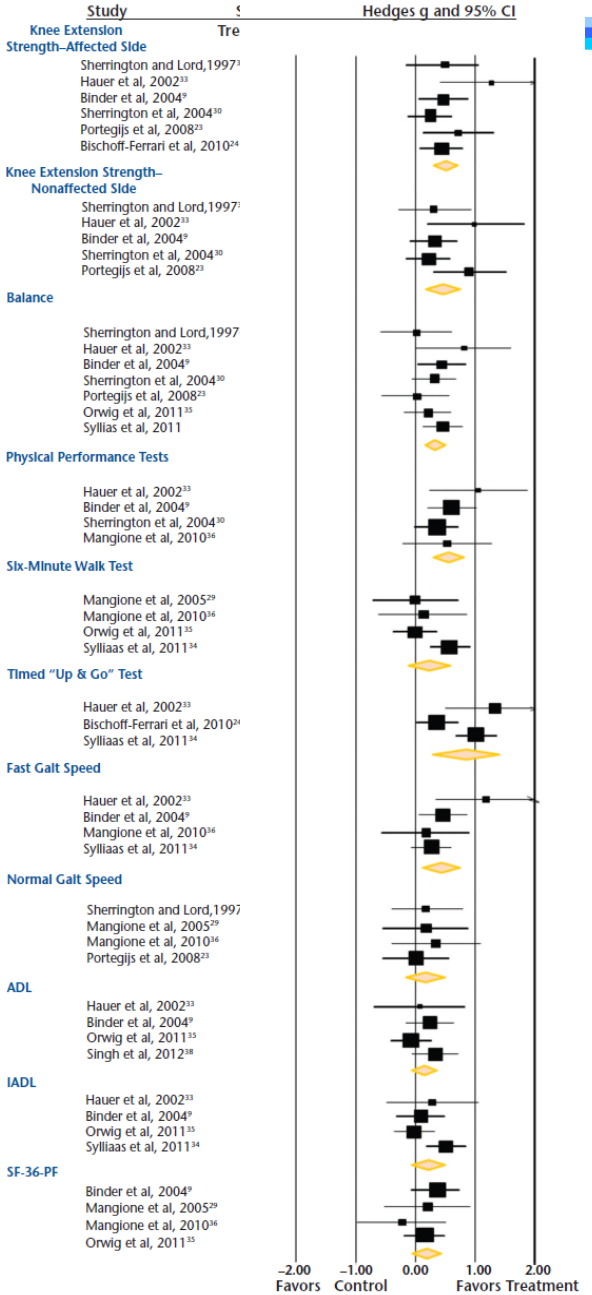
Extended rehabilitation

Extended Exercise Rehabilitation After Hip Fracture Improves Patients' Physical Function: A Systematic Review and Meta-Analysis

Mohammad A. Auais, Owis Eilayyan, Nancy E. Mayo



Auais et al Physical Therapy, 2012



Conclusioni

La traiettoria di recupero del paziente con frattura di femore non è lineare nel tempo.

Interventi di riabilitazione estensiva possono fornire una più elevata probabilità di recupero funzionale e miglioramento degli outcomes a lungo termine.

…Sono pertanto auspicabili tutti i programmi che, attraverso interventi multidisciplinare favoriscano la continuità assistenziale e mantengano una supervisione del paziente soprattutto sulla autonomia motoria, l'attività fisica, l'apporto alimentare, l'aderenza alla terapia, il tono dell'umore ed in generale intervengano precocemente sui problemi emergenti.

GIOG Pos. Statement 2013