SOCIETÀ ITALIANA

G.U.I.D.A.

PER LA GESTIONE UNIFICATA E INTERDISCIPLINARE
DEL DOLORE MUSCOLO-SCHELETRICO E DELL'ALGODISTROFIA

I CONGRESSO NAZIONALE

NAPOLI *9-11 marzo 2017*

NAPOLI
Hotel Royal Continental

RELATORE

Marco Invernizzi

9-11 marzo 2017

Università del Piemonte Orientale - Novara

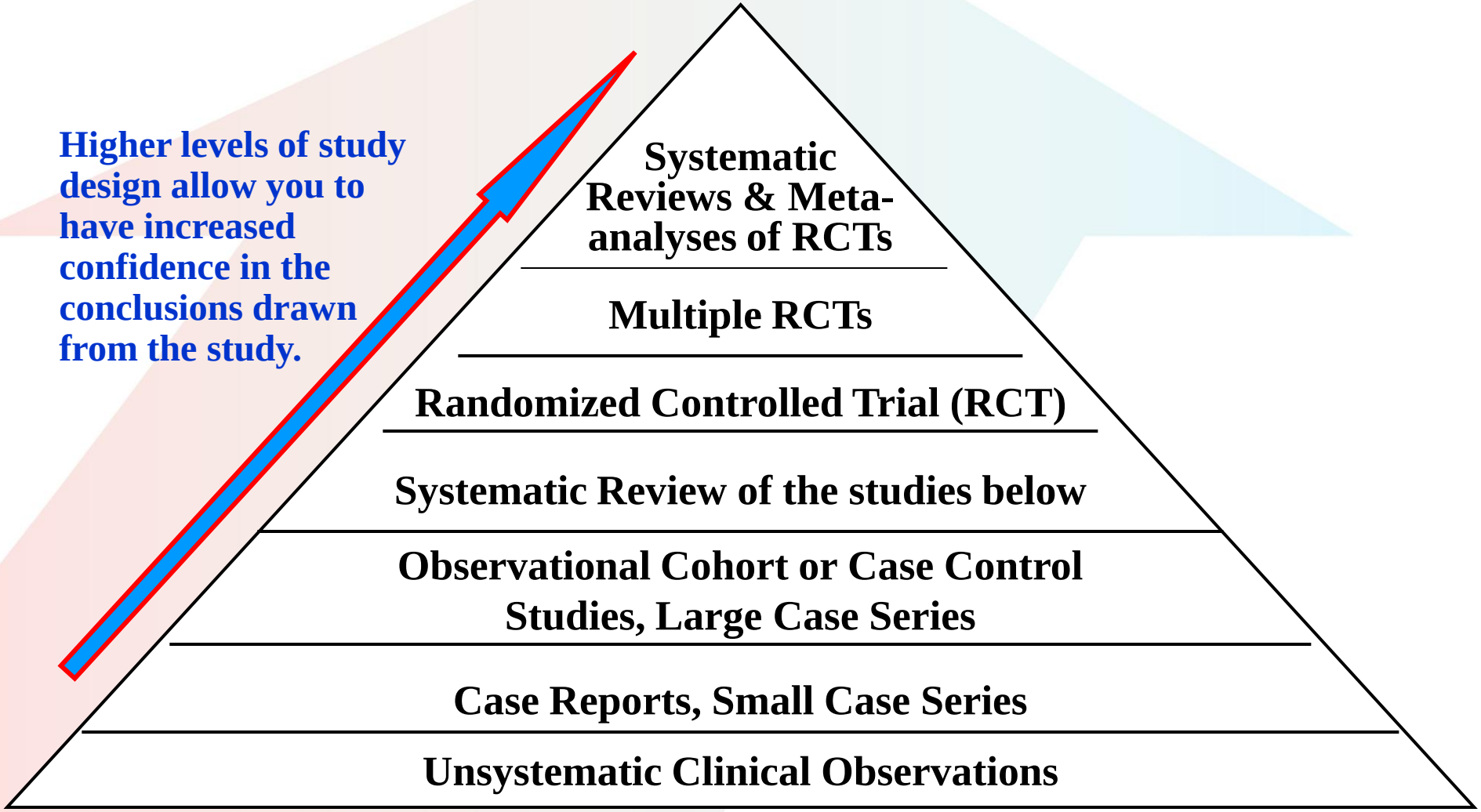
Manipolazione

“ una terapia manuale passiva che consiste in una mobilizzazione ad alta velocità e ridotta ampiezza, oltre la capacità fisiologica articolare, senza eccedere il limite anatomico, accompagnata (non obbligatoriamente) da una cavitazione delle faccette (crack).”

Manipulation Education Committee, June 2003

Hierarchy of Evidence for Treatment

Higher levels of study design allow you to have increased confidence in the conclusions drawn from the study.



U.S. Department of Health and Human services
Agency for Health Care Policy and Research
AHCPR Publication No. 95-0643
December 1994

Table 5. Summary of Guideline Recommendations

Physical treatment methods 42 studies	Manipulation of low back during first month of symptoms (B).	Manipulation for patients with radiculopathy (C). Manipulation for patients with symptoms >1 month (C). Self-application of heat or cold to low back. Shoe insoles (C). Corset for prevention in occupational setting (C).	Manipulation for patients with undiagnosed neurologic deficits (D). Prolonged course of manipulation (D). Traction (B). TENS (C). Biofeedback (C). Shoe lifts (D). Corset for treatment (D).
Injections 26 studies		Epidural steroid injections for radicular pain to avoid surgery (C).	Epidural injections for back pain without radiculopathy (D). Trigger point injections (C). Ligamentous injections (C). Facet joint injections (C). Needle acupuncture (D).

ACC
PREVENTION. CARE. RECOVERY.
Te Kaporeihana Āwhina Hunga Whara

ENDORSED AS A BEST PRACTICE GUIDELINE BY

NEW ZEALAND GUIDELINES GROUP

New Zealand Acute Low Back Pain Guide

INCORPORATING THE
GUIDE TO ASSESSING PSYCHOSOCIAL YELLOW FLAGS IN ACUTE LOW BACK PAIN

SUMMARY OF MANAGEMENT OPTIONS

EVIDENCE	MANAGEMENT OPTIONS	GRADE OF RECOMMENDATION
Improvement Evidence of improved clinical outcomes	Advice to stay active (including work)	A
	Analgesia using Paracetamol and non-steroidal anti-inflammatory drugs	A
	Manipulation – in the first 4-6 weeks only	A
	A multidisciplinary approach to management	B
No improvement Evidence of no improvement in clinical outcomes	TENS (transcutaneous electrical nerve stimulation)	A
	Traction	A
	Specific back exercises	A
	Education pamphlets about low back symptoms	A
	Massage	A
	Acupuncture	A
	Surgery (unless disc decompression is indicated)	A
Harmful Evidence of harm	Use of narcotics or diazepam	A
	Bed rest for more than 2 days	A
	Bed rest, with or without traction	A
	Manipulation under general anaesthesia	A
	Plaster jacket	A
Insufficient evidence Insufficient evidence to comment on effectiveness	Conditioning exercises for the trunk muscles	
	Aerobic conditioning	
	Epidural steroid injections	
	Shoe lifts or corsets	
	Biofeedback	
	Physical agents and passive modalities (includes ice, heat, short wave diathermy, and ultrasound)	

The evidence on which these recommendations are made was graded using the SIGN (Scottish Intercollegiate Guidelines Network) grading system. Details of the grading system are on page 22.

Royal College of General Practitioners
Encouraging, fostering and maintaining the highest possible standards in general medical practice

Clinical Guidelines for the Management of Acute Low Back Pain

Review Date: December 2001
ISBN Number 0 85084 229 8

Waddell G, McIntosh A, Hutchinson A, Feder G, Lewis M, (1999) *Low Back Pain Evidence Review* London: Royal College of General Practitioners

Recommendations
Manipulation Consider manipulative treatment for patients who need additional help with pain relief or who are failing to return to normal activities.

Evidence

★ ★ ★	In acute and sub-acute back pain, manipulation provides better short-term improvement in pain and activity levels and higher patient satisfaction than the treatments to which it has been compared.
★	However, there is no firm evidence that it is possible to select which patients will respond or what kind of manipulation is most effective. The optimum timing for this intervention is unclear
★ ★	The risks of manipulation for low back pain are very low, provided patients are selected and assessed properly and it is carried out by a trained therapist or practitioner. Manipulation should not be used in patients with severe or progressive neurological deficit in view of the rare but serious risk of neurological complication.

Eur Spine J (2006) 15 (Suppl. 2): S169–S191
DOI 10.1007/s00586-006-1071-2

Chapter 3
European guidelines for the management of acute nonspecific low back pain in primary care

Maurits van Tulder
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Maria Teresa Gil del Real
Allen Hutchinson
Bart Koes
Even Laerum
Antti Malmivaara

On behalf of the COST B13 Working Group on Guidelines for the Management of Acute Low Back Pain in Primary Care

Versus placebo/Sham: miglioramento a breve termine dolore e funzione rispetto a sham. Beneficio perso a 6 mesi di follow up.

Versus altri trattamenti: nessun vantaggio rispetto ad altri approcci (farmacologico, terapia fisica, esercizio) per riduzione dolore e miglioramento funzione.

NON REPERIBILI….

- Borkan J, Reis S, Werner S, Ribak J, Prath A. Guidelines for treating low back pain in primary care (Hebrew; available in English). The Israeli Low Back Pain Guideline Group. *Harfuah* 1996; 130: 145-151. [**Israel**]

- Faas A, Chavannes AW, Koes BW, Van den Hoogen JMM, Mens JMA, Smeele IJM, Romeijnders ACM, Van der Laan JR. Clinical practice guidelines for low back pain. (Dutch, available in En- glish). *Huisarts Wet* 1996;39:18-31. [**the Netherlands**]

- Victorian Workcover Authority. Guidelines for the management of employees with compensable low back pain. Mel- bourne, Victorian Workcover Authori- ty. 1993 and revised edition 1996. [**Australia**]

Spinal manipulative therapy for chronic low-back pain (Review)

Rubinstein SM, van Middelkoop M, Assendelft WJJ, de Boer MR, van Tulder MW

THE COCHRANE COLLABORATION®

THE COCHRANE COLLABORATION®

- SMT è efficace al pari di altre terapie usate comunemente per il low back pain cronico
- Vi sono notevoli evidenze nel breve termine su dolore e stato funzionale
- 2/3 degli studi presentano un elevato rischio di bias e i risultati vanno analizzati con cautela
- Scarsi effetti collaterali
- *“SMT non è né meglio né peggio delle terapie attualmente esistenti per il low back pain cronico”*

Manipulation/Mobilization Systematic Review

(Gross, Cochrane Collaboration, 2004)

- **Strong evidence supporting manipulation plus exercise** to improve short- and long-term outcomes of care for patients with neck pain disorders

ACP American College of Physicians℠
Leading Internal Medicine, Improving Lives

CLINICAL GUIDELINE

Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert M. McLean, MD; and Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians*

Description: The American College of Physicians (ACP) developed this guideline to present the evidence and provide clinical recommendations on noninvasive treatment of low back pain.

Methods: Using the ACP grading system, the committee based these recommendations on a systematic review of randomized, controlled trials and systematic reviews published through April 2015 on noninvasive pharmacologic and nonpharmacologic treatments for low back pain. Updated searches were performed through November 2016. Clinical outcomes evaluated included reduction or elimination of low back pain, improvement in back-specific and overall function, improvement in health-related quality of life, reduction in work disability and return to work, global improvement, number of back pain episodes or time between episodes, patient satisfaction, and adverse effects.

Target Audience and Patient Population: The target audience for this guideline includes all clinicians, and the target patient population includes adults with acute, subacute, or chronic low back pain.

Recommendation 1: *Given that most patients with acute or subacute low back pain improve over time regardless of treatment, clinicians and patients should select nonpharmacologic treatment with superficial heat (moderate-quality evidence), massage, acupuncture, or spinal manipulation (low-quality evidence). If pharmacologic treatment is desired, clinicians and patients should select nonsteroidal anti-inflammatory drugs or skeletal muscle relaxants (moderate-quality evidence). (Grade: strong recommendation)*

Recommendation 2: *For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, mindfulness-based stress reduction (moderate-quality evidence), tai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy, or spinal manipulation (low-quality evidence). (Grade: strong recommendation)*

Recommendation 3: *In patients with chronic low back pain who have had an inadequate response to nonpharmacologic therapy, clinicians and patients should consider pharmacologic treatment with nonsteroidal anti-inflammatory drugs as first-line therapy, or tramadol or duloxetine as second-line therapy. Clinicians should only consider opioids as an option in patients who have failed the aforementioned treatments and only if the potential benefits outweigh the risks for individual patients and after a discussion of known risks and realistic benefits with patients. (Grade: weak recommendation, moderate-quality evidence)*

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For author affiliations, see end of text.
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Harms	Generally poorly reported Pharmacologic NSAIDs: increased adverse effects compared with placebo and acetaminophen (COX-2–selective NSAIDs decreased risk for adverse effects compared with traditional NSAIDs) Opioids: nausea, dizziness, constipation, vomiting, somnolence, and dry mouth SMRs: increased risk for any adverse event and central nervous system adverse events (mostly sedation) Benzodiazepines: somnolence, fatigue, lightheadedness Antidepressants: increased risk for any adverse event Nonpharmacologic Poorly reported, but no increase in serious adverse effects

Complicanze manipolazioni low back pain

Haldeman and Rubenstein (*Spine*, 1992)

- Revisione di letteratura di 77 anni
- 10 episodi di cauda equina dopo manipolazione lombare
- Rischio stimato: < 1 per 10 milioni di manipolazioni

Procedure	Reported Risk	Est # / 10,000	Potential Complication
Lumbo-Sacral Manipulation	1 / 10,000,000	0.001	Cauda Equina
Exercise	1 / 1,500,000	0.007	Sudden Death
NSAIDS	1- 3 / 100	100 – 300	GI bleed
ESI (w/ fluoroscopy)	8 – 11 / 100	800 - 1100	Intravascular Injection
Disc Surgery	1.6 – 17 / 10,000	1.6 – 17	Vascular perforations
Disc Surgery	3.8 / 10,000	3.8	Visceral injuries
Fusion	17 / 100	1700	Varied
Discectomy, laminectomy, +/- fusion	0.2-0.3 / 100	20 – 30	Death

Cause di Complicanze neurovascolari cervicali
(Haldeman, *Spine*, 1999)

- 367 cases between 1966-1993 involving vertebral artery dissection and/or occlusion, regardless of the mechanism of injury
- Major trauma – MVA, fall, direct impact, contact sport injuries, etc.
- Trivial trauma – sudden head movements, sporting activities, sustained rotation and/or extension, backing out of driveway
- Spontaneous – non-recent trauma, past VBI, driving in car, pregnancy, standing up briskly after a nap

Mechanism	No. (%) of cases
Spontaneous	160 (43)
Cervical manip	115 (31)
Trivial trauma	58 (16)
Major trauma	37 (10)
Total	367

CONCLUSIONI

- SMT - Raccomandazione nel low back pain acuto, subacuto e cronico (ACP 2017)
- Evidenza SMT più esercizio nelle problematiche cervicali (Gross, cochrane 2004)
- Scarsi effetti collaterali a livello lombare – spesso non riportati
- Bias