Low back pain: la gestione del dolore cronico

Dott. Stefano Stisi

Patologia cronica tra le più frequenti: review recenti

Ambiente	prevalenza	titolo	autori	rivista	Anno, nazione
Popolazione generale	**4,2-25,4%**	Prevalence of chronic low back pain: systematic review	Meucci RD, Fassa AG et al	Rev Saúde Pública	2015, Brazil
Popolazione generale	**11.9 ± 2.0%**	A systematic review of the global prevalence of low back pain	Hoy D, Bain C et al	Arthritis Rheum	2012, Australia
Anziani	**21-75%**	Prevalence of low back pain in the elderly population: a systematic review	de Souza IMB, Sakaguchi TF	Clinics (Sao Paulo)	2019, Brazil
Tra i runners	**0,7-13,6%**	Prevalence and incidence of low back pain among runners: a systematic review	Maselli F, Storari L et al	BMC Musculoskelet Disord.	2020, Italy

Sintomo comune a diverse condizioni patologiche: diagnosi differenziale

La prima azione terapeutica è una attenta diagnosi differenziale

All’effetto sommatorio doloroso possono prendere parte contemporaneamente più patologie

- **Patologie discali** (protrusioni, ernie).
- **Patologie del corpo vertebrale** (osteoporosi, spondilodisciti, neoplasie, etc).
- **Patologie delle articolazioni** (artrosi, artrite, etc).
- **Patologie dei tendini e dei muscoli** (sindrome dolorosa miofasciale, fibromialgia).
- **Patologie viscerali croniche** (pancreatite, colonpatie, etc).
- **Patologie delle componenti nervose periferiche** (conflitti disco-radicolari).

Strategia terapeutica

- Riconoscere la/le causa/e
- Curare la causa
- **Ridurre il sintomo** e la disabilità
- Ridurre il numero di riaccensioni annuali
- Progettare sempre una terapia di fondo e una sintomatica per le riaccensioni dolorose

A MECHANISTIC APPROACH TO PAIN

Any combination may be present in a given individual

Peripheral (nociceptive)	Neuropathic	Central (non-nociceptive)

• Inflammation or mechanical damage in all tissues
• NSAID, opioid responsive
• Responds to procedures
• Behavioral factors minor
• Classic examples
  • Osteoarthritis
  • Rheumatoid arthritis
  • Cancer pain
	• Damage or entrapment of peripheral nerves
	• Responds to both peripheral (NSAIDs, opioids, Na channel blockers) and central (TCAs, neuroactive compounds) pharmacologic therapy
		• Characterized by central disturbance in pain processing (diffuse hyperalgesia)
		• Tricyclic, neuroactive compounds most effective
		• Behavioral factors more prominent
		• Classic examples
		  • Fibromyalgia
		  • Irritable bowel syndrome
		  • Tension headache
		  • Idiopathic low back pain

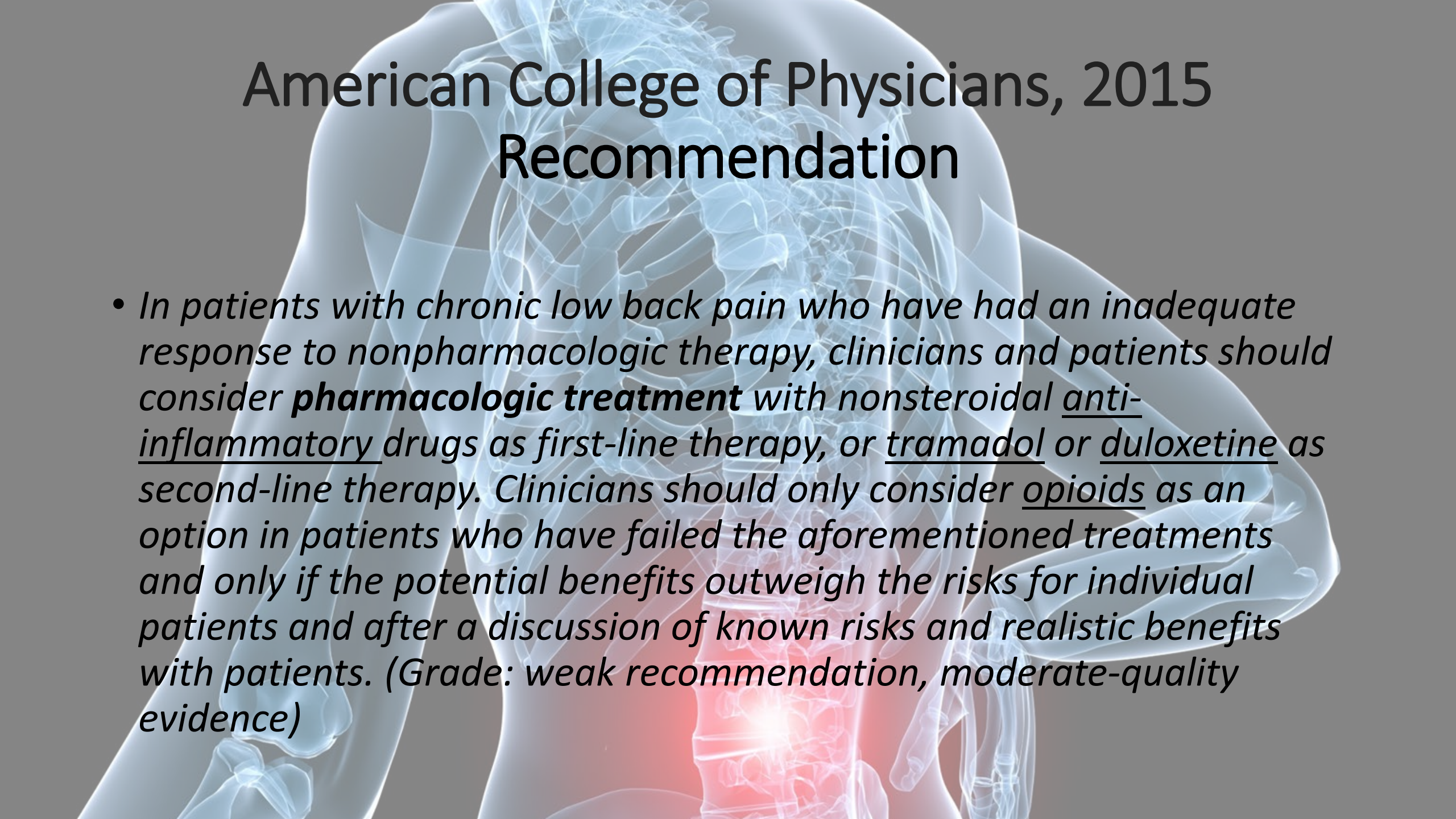
Autogestione del mal di schiena

- Utilizzo locale di mezzi termici (borsa termica, mantella riscaldante, borsa di ghiaccio).
- Utilizzo di cinture, corsetti, fasce elastiche, busti.
- Manipolazioni vertebrali.
- Uso di FANS o di steroidi.
- Riposo.

American College of Physicians, 2015 Recommendation

- *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)*

American College of Physicians, 2015 Recommendation



- *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)*

American College of Physicians, 2015 Recommendation

- **NSAID**

Moderate-quality evidence showed that NSAIDs were associated with small to moderate pain improvement compared with placebo (1, 2, 3). Low-quality evidence showed that NSAIDs were associated with no to small improvement in function (2, 4). Moderate-quality evidence showed that most head-to-head trials of one NSAID versus another showed no differences in pain relief in patients with chronic LBP.

1) Roelofs PD , Deyo RA , Koes BW , Scholten RJ , and van Tulder MW . Non-steroidal anti-inflammatory drugs for low back pain. Cochrane Database Syst Rev. 2008ow back pain (14). There were no data on COX-2–selective NSAIDs.

2) Katz N , Borenstein DG , Birbara C , Bramson C , Nemeth MA , Smith MD , et al. Efficacy and safety of tanezumab in the treatment of chronic low back pain. Pain. 2011;152:2248-58.

3) Kivitz AJ , Gimbel JS , Bramson C , Nemeth MA , Keller DS , Brown MT , et al. Efficacy and safety of tanezumab versus naproxen in the treatment of chronic low back pain. Pain. 2013;154:1009-21.

4) Katz N , Ju WD , Krupa DA , Sperling RS , BozalisRodgers D , Gertz BJ , et al. Vioxx Chronic Low Back Pain Study Group. Efficacy and safety of rofecoxib in patients with chronic low back pain: results from two 4-week, randomized, placebo-controlled, parallel-group, double-blind trials. Spine (Phila Pa 1976). 2003;28:851-8.

American College of Physicians, 2015 Recommendation

- **Oppioids**

Moderate-quality evidence showed that **strong opioids** (tapentadol, morphine, hydromorphone, and oxymorphone) were associated with a small short-term improvement in pain scores (about 1 point on a pain scale of 0 to 10) and function compared with placebo (1–2).

Low-quality evidence showed that **buprenorphine** patches improved short-term pain more than placebo in patients with chronic low back pain; however, the improvement corresponded to less than 1 point on a pain scale of 0 to 10.

Moderate-quality evidence showed no differences among different **long-acting opioids** for pain or function, and low-quality evidence showed no clear differences in pain relief between long- and short-acting opioids. Moderate-quality evidence showed that tramadol achieved moderate short-term pain relief and a small improvement in function compared with placebo.

1) Chaparro LE , Furlan AD , Deshpande A , Mailis-Gagnon A , Atlas S , and Turk DC . Opioids compared to placebo or other treatments for chronic low-back pain. Cochrane Database Syst Rev. 2013
2) Wen W , Sitar S , Lynch SY , He E , and Ripa SR . A multicenter, randomized, double-blind, placebo-controlled trial to assess the efficacy and safety of single-entity, once-daily hydrocodone tablets in patients with uncontrolled moderate to severe chronic low back pain. Expert Opin Pharmacother. 2015;16:1593-606

American College of Physicians, 2015 Recommendation

- **SMRs**

Evidence comparing SMRs versus placebo was insufficient. Low-quality evidence showed no differences in any outcome between different SMRs for treatment of chronic low back pain.

- **Benzodiazepines**

Low-quality evidence showed that **tetrazepam** improved pain relief at 5 to 7 days and resulted in overall improvement at 10 to 14 days compared with placebo.

- **Antidepressants**

Moderate-quality evidence showed no difference in pain between **tricyclic antidepressants (TCAs) or selective serotonin reuptake inhibitors (SSRIs)** versus placebo, and low-quality evidence showed no differences in function for antidepressants. Moderate-quality evidence showed that **duloxetine** was associated with a small improvement in pain intensity and function compared with placebo.

Evidence-based treatment recommendations for neck and low back pain across Europe: A systematic review of guidelines.

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REVIEW ARTICLE

EJP

Evidence-based treatment recommendations for neck and low back pain across Europe: A systematic review of guidelines

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Abstract

Background and objective: This systematic review synthesized evidence from European neck and low back pain (NLBP) clinical practice guidelines (CPGs) to identify recommended treatment options for use across Europe.

Databases and Data Treatment: Comprehensive searches of thirteen databases were conducted, from 1st January 2013 to 4th May 2020 to identify up-to-date evidence-based European CPGs for primary care management of NLBP, issued by professional bodies/organizations. Data extracted included; aim and target population, methods for development and implementation and treatment recommendations. The AGREE II checklist was used to critically appraise guidelines. Criteria were devised to summarize and synthesize the direction and strength of recommendations across guidelines.

Results: Seventeen CPGs (11 low back; 5 neck; 1 both) from eight European countries were identified, of which seven were high quality. For *neck pain*, there were consistent *weak* or *moderate* strength recommendations for: reassurance, advice and education, manual therapy, referral for exercise therapy/programme, oral analgesics and topical medications, plus psychological therapies or multidisciplinary treatment for specific subgroups. Notable recommendation differences between back and neck pain included, i) analgesics for neck pain (not for back pain); ii) options for back pain-specific subgroups—work-based interventions, return to work advice/programmes and surgical interventions (but not for neck pain) and iii) a greater strength of recommendations (generally moderate or strong) for back pain than those for neck pain.

Conclusions: This review of European CPGs identified a range of mainly non-pharmacological recommended treatment options for NLBP that have broad consensus for use across Europe.

Significance: Consensus regarding evidence-based treatment recommendations for patients with neck and low back pain (NLBP) from recent European clinical practice guidelines identifies a wide range of predominantly non-pharmacological treatment options. This includes options potentially applicable to all patients with NLBP and those applicable to only specific patient subgroups. Future work within our Back-UP

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Conclusions: This review of European CPGs identified a range of mainly non-pharmacological recommended treatment options for NLBP that have broad consensus for use across Europe.

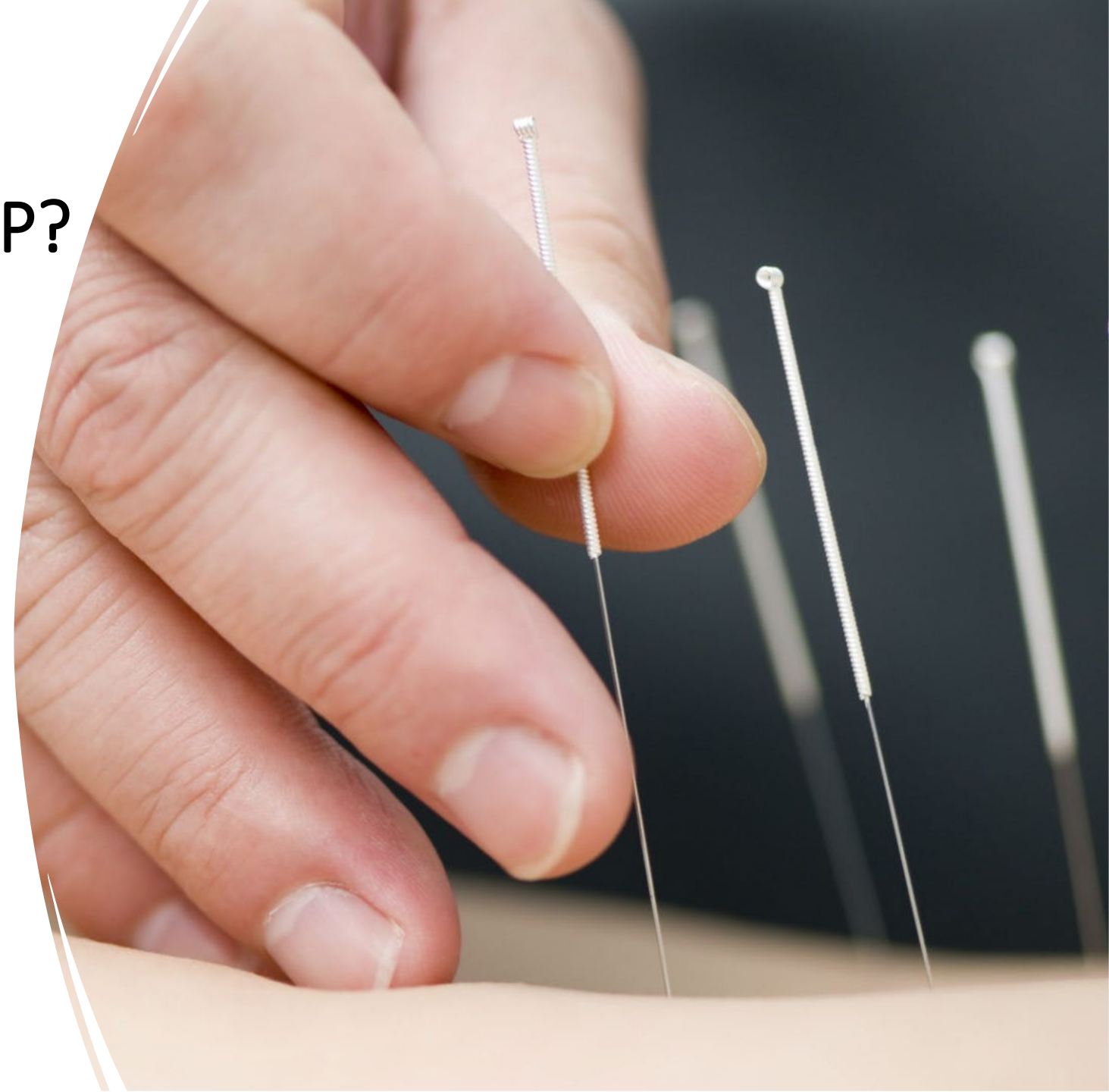
Intervention FOR	Overall strength of recommendation	Comments
• **Advice and Education (including individualised)**	Strong FOR	
• **Remain active**	Strong FOR	
• **Exercise programs/therapy**	Strong FOR	
• **Psychological therapies including behavioural and CBT**	Strong FOR SPECIFIC SUBGROUPS	For specific cases: mood problems, psychosocial risks, or complex, persistent pain problems
• **Multidisciplinary treatment including MBR programs, and multidisciplinary rehabilitation involving work focus**	Strong FOR SPECIFIC SUBGROUPS	For specific cases: subacute and chronic LBP with patient strongly motivated to resolve and/or psychosocial obstacles to recovery.
• **Return to work programmes**	Strong FOR	
• **To surgeon/surgery**	Strong FOR SPECIFIC SUBGROUPS	For specific cases: failure of nonsurgical treatment, moderate/severe persistent pain; specific indications e.g. cauda equine, severe neurological symptoms etc.

Intervention AGAINST	Overall strength of recommendation	Comments
• **Bed rest**	Strong AGAINST	
• **Antidepressants including SSRIs, SNRIs, Tricyclics**	Strong AGAINST WITH EXCEPTIONS	For specific cases: comorbid depression (BÄK et al., 2017, high quality) or chronic pain [tricyclics only] (Glocker et al., 2018, low quality)
• **Anticonvulsants/Antiepileptics including gabapentin, pregablin, carbamazepine, topiramat**	Strong AGAINST	
• **Muscle relaxants including diazepines/benzodiazepines**	Strong AGAINST WITH EXCEPTIONS	For specific cases: non-specific LBP where non-drug and nonopioid treatments ineffective (BÄK et al., 2017, high quality); 2nd line medication for acute non-specific LBP (Regione Toscana, 2015, Low quality)
• **Spinal injections [for non-specific LBP]**	Strong AGAINST	
• **Traction**	Strong AGAINST	
• **Electrotherapy including laser therapies, TENS, PENS, shortwave diathermy, US, ultra-shortwave, inferential, magnetic field, electromagnetic, light therapy, shockwave, electrostimulation**	Strong AGAINST	

In conclusione come affrontare il dolore nel CLBP?

First line

1. *For patients with chronic low back pain, clinicians and patients should initially select non pharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, mindfulness-based stress reduction, tai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy.*



Second line

2. *Always <u>remain active</u>*

Third line

3. *Return to work programmes*

Fourth line

- *In patients with chronic low back pain who have had an inadequate response to non pharmacologic 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.*

Epicuro, IV sec a.C.

I mali se affliggono duramente affliggono per poco, altrimenti se lo fanno a lungo vuol dire che si possono sopportare.