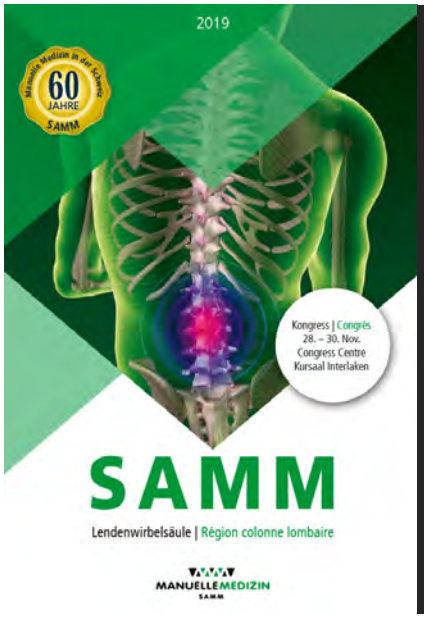


Erweiterte Therapieoptionen

Prof. Dr. Hannu Luomajoki, PhD, PD, PT OMT
ZHAW

Reto Genucchi
Martin Pielok
Dr. med. Sven Michelsen
Alexander Bohlander

Background Rückenschmerzen

Kosten Rückenschmerzen CH

Ca. 3 Millionen Arztkonsultationen pro Jahr

Totalkosten Rückenschmerzen: 11.0 Mrd

Direkte Medizinische Kosten: ca. 4 Mrd

Indirekte Kosten (Arbeitsausfall, IV): 7 Mrd

(Interpharma, 2013)

THE LANCET March 2018

Series

Low back pain 1

What low back pain is and why we need to pay attention

Jan Hartvigsen*, Mark J Hancock*, Alice Kongsted, Quinette Louw, Manuela L Ferreira, Stéphane Genevay, Damian Hoy, Jaro Karppinen, Glenn Pransky, Joachim Sieper, Rob J Smeets, Martin Underwood, on behalf of the Lancet Low Back Pain Series Working Group†

Low back pain 2

Prevention and treatment of low back pain: evidence, challenges, and promising directions

Nadine E Foster, Johannes R Anema, Dan Cherkin, Roger Chou, Steven P Cohen, Douglas P Gross, Paulo H Ferreira, Julie M Fritz, Bart W Koes, Wilco Peul, Judith A Turner, Chris G Maher, on behalf of the Lancet Low Back Pain Series Working Group*

Low back pain: a call for action

Rachelle Buchbinder, Maurits van Tulder, Birgitta Öberg, Lucíola Menezes Costa, Anthony Woolf, Mark Schoene, Peter Croft, on behalf of the Lancet Low Back Pain Series Working Group*

Low Back Pain: the medical disaster of today

Entmystifizieren

Beispiel strukturelle Befunde in MR-Untersuchungen:
Vergleiche zwischen Gesunden und Patienten mit Rückenschmerzen

Kein Unterschied zwischen Gesunden und Patienten!

Systematic Literature Review of Imaging Features of Spinal Degeneration in Asymptomatic Populations

W. Brinjikji, P.H. Luetmer, B. Comstock, B.W. Bresnahan, L.E. Chen, R.A. Deyo, S. Halabi, J.A. Turner, A.L. Avins, K. James, J.T. Wald, D.F. Kallmes, and J.G. Jarvik

Table 2: Age-specific prevalence estimates of degenerative spine imaging findings in asymptomatic patients*

	Age (yr)						
Imaging Finding	20	30	40	50	60	70	80
Disk degeneration	37%	52%	68%	80%	88%	93%	96%
Disk signal loss	17%	33%	54%	73%	86%	94%	97%
Disk height loss	24%	34%	45%	56%	67%	76%	84%
Disk bulge	30%	40%	50%	60%	69%	77%	84%
Disk protrusion	29%	31%	33%	36%	38%	40%	43%
Annular fissure	19%	20%	22%	23%	25%	27%	29%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

* Prevalence rates estimated with a generalized linear mixed-effects model for the age-specific prevalence estimate (binomial outcome) clustering on study and adjusting for the midpoint of each reported age interval of the study.

Spinalkanalstenose…

Operieren ?….

Annals of Internal Medicine ORIGINAL RESEARCH

Surgery Versus Nonsurgical Treatment of Lumbar Spinal Stenosis

A Randomized Trial

Anthony Delitto, PT, PhD; Sara R. Piva, PT, PhD; Charity G. Moore, PhD, MSPH; Julie M. Fritz, PT, PhD; Stephen R. Wisniewski, PhD; Deborah A. Josbeno, PT, PhD; Mark Fye, MD; and William C. Welch, MD

Background: Primary care management decisions for patients with symptomatic lumbar spinal stenosis (LSS) are challenging, and nonsurgical guidance is limited by lack of evidence.

Objective: To compare surgical decompression with physical therapy (PT) for LSS and evaluate sex differences.

Design: Multisite randomized, controlled trial. (ClinicalTrials .gov: NCT00022776)

Setting: Neurologic and orthopedic surgery departments and PT clinics.

Participants: Surgical candidates with LSS aged 50 years or older who consented to surgery.

Intervention: Surgical decompression or PT.

Measurements: Primary outcome was physical function score on the Short Form-36 Health Survey at 2 years assessed by masked testers.

Results: The study took place from November 2000 to September 2007. A total of 169 participants were randomly assigned and stratified by surgeon and sex (87 to surgery and 82 to PT), with 24-month follow-up completed by 74 and 73 participants in the surgery and PT groups, respectively. Mean improvement in physical function for the surgery and PT groups was 22.4 (95% CI, 16.9 to 27.9) and 19.2 (CI, 13.6 to 24.8), respectively. Intention-to-treat analyses revealed no difference between groups (24-month difference, 0.9 [CI, −7.9 to 9.6]). Sensitivity analyses using causal-effects methods to account for the high proportion of crossovers from PT to surgery (57%) showed no significant differences in physical function between groups.

Limitation: Without a control group, it is not possible to judge success attributable to either intervention.

Conclusion: Surgical decompression yielded similar effects to a PT regimen among patients with LSS who were surgical candidates. Patients and health care providers should engage in shared decision-making conversations that include full disclosure of evidence involving surgical and nonsurgical treatments for LSS.

Primary Funding Source: National Institutes of Health and National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Ann Intern Med. 2015;162:465-473. doi:10.7326/M14-1420 www.annals.org

For author affiliations, see end of text.

Medikamente ?….

- n= ca. 1500 Patients
- Three groups: Paracetamol 4 g / day; like needed up tp 4 g / d, Placebo
- In all groups, after 17 days approximately, pain was gone
- No differences between groups….

www.thelancet.com July, 2014

Efficacy of paracetamol for acute low-back pain: a double-blind, randomised controlled trial

Christopher M Williams, Christopher G Maher, Jane Latimer, Andrew J McLachlan, Mark J Hancock, Richard O Day, Chung-Wei Christine Lin

Medikamente….

Table 1. Summary of the evidence on the efficacy of pharmacological treatments on pain and function in patients with chronic low back pain

Pharmacological treatment	Evidence	Effect on pain	Effect on function
Paracetamol/acetaminophen	1 RCT	Uncertain	Uncertain
NSAIDS	13 RCTs	Small	Small
Muscle relaxants (skeletal)	3 RCTs	Uncertain	Uncertain
Benzodiazepines	2 RCTs	Small	Uncertain
Tricyclic antidepressants	4 RCTs	No	No
Selective serotonin reuptake inhibitors	3 RCTs	No	No
Duloxetine	1 RCTs	Small	Small
Anticonvulsants	2 RCTs	No	No
Tramadol	1 RCTs	Small	Small
Buprenorphine	2 RCTs	Small	Uncertain
Strong opioids*	6 RCTs	Small	Small
Other			
Tanezumab	4 RCTs	Small-moderate	Small
Botulinum toxin injections	1 RCT	Small	Small
Melatonin	1 CTs	Small	Small

*morphine, hydromorphone, oxycodone, oxymorphone, and tapentadol.

EXPERT OPINION ON PHARMACOTHERAPY, 2018
VOL. 19, NO. 6, 537–545
https://doi.org/10.1080/14656566.2018.1454430

Taylor & Francis

REVIEW

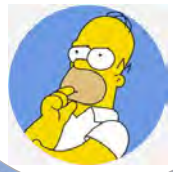
Pharmacotherapy for chronic non-specific low back pain: current and future options

Bart W. Koes, Daan Backes and Patrick J. E. Bindels

Department of General Practice, Erasmus MC, Rotterdam, The Netherlands

ernüchternd

Expert opinion: The overall impression of the efficacy of pharmacological treatments for patients with chronic low back pain is rather sobering. The effects on pain reduction and improvement of function are commonly small to moderate and short lasting when compared to placebo. At the same time, the various types of drugs are not without side-effects. This holds especially true for serious side-effects



Anticonvulsants in the treatment of low back pain and lumbar radicular pain: a systematic review and meta-analysis

Oliver Enke MBBS MSc, Heather A. New MBBS MPH, Charles H. New MBBS, Stephanie Mathieson PhD, Andrew J. McLachlan PhD, Jane Latimer PhD, Christopher G. Maher PhD, C.-W. Christine Lin PhD

Cite as: *CMAJ* 2018 July 3;190:E786-93. doi: 10.1503/cmaj.171333

Lyrica & Co… also clear evidence of … no effectivity….

- Results: Nine trials compared topiramate, gabapentin or pregabalin to placebo in 859 unique participants.
- Fourteen of 15 comparisons found anticonvulsants **were not effective to reduce pain or disability in low back pain or lumbar radicular pain**; for example, there was high-quality evidence of no effect of gabapentinoids versus placebo on chronic low back pain in the short term (pooled mean difference [MD] –0.0, 95% confidence interval [CI] –0.8 to 0.7) or for lumbar radicular pain in the immediate term (pooled MD –0.1, 95% CI –0.7 to 0.5). **The lack of efficacy is accompanied by increased risk of adverse events from use of gabapentinoids**, for which the level of evidence is high.

US Guideline Treatment of back pain 2017

ACP American College of Physicians

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*

Ann Intern Med. doi:10.7326/M16-2367 Annals.org

This article was published at Annals.org on 14 February 2017.

- **Recommendation 1:** *…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).*

- **Recommendation 2:** *…..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 known risks and realistic benefits with patients. (Grade: weak recommendation, moderate-quality evidence)*

• *…… Low cost treatments should be preferred…..!*

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Low back pain 2

Prevention and treatment of lo… challenges, and promisin…

Nadine E Foster, Johannes R Anema, Dan Ch… …M Ferreira, Julie M Fritz, Bart W Koes, Wilco Peul, Judith A Turner, Chris G M… …g Group*

Lo… …tion

Rachelle B… …Oberg, Luciola Menezes Costa, Anthony Woolf, Mark Schoene, Peter Croft, on behalf of the Lancet Low … …p*

… in etwa alles… was wir mit Rückenpatienten machen…
… ist falsch…

The Lancet series on low back pain: reflections and clinical implications

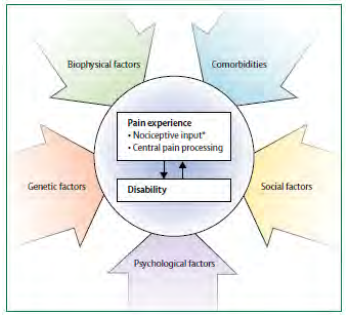
Kieran O'Sullivan,[1,2] Peter B O'Sullivan,[3,4] Mary O'Keeffe[5]

Br J Sports Med April 2019 Vol 53 No 7

- Low back pain (LBP) is a major global challenge, and back-related disability is increasing.
- The majority of LBP is not serious and cannot be linked to a specific structure.
- Most red flags have limited diagnostic accuracy.
- Imaging use is often inappropriate for non-specific LBP.
- Non-pharmacological treatments such as advice and activity should be first-line options in the treatment of non-specific LBP.
- Opioids have small effects, but have substantial risks.
- Psychosocial factors are important contributors to LBP and associated disability.
- A systems approach to LBP involving clinical pathway redesign, changes to payment systems and legislation, and integrated health and workplace strategies is needed.
- Advocate the concept of positive health for LBP—the ability to adapt and to self-manage in the face of social, physical and emotional challenges.
- Need to change widespread misconceptions about the causes, prognosis and effectiveness of different treatments for LBP.

Structural factors; degeneration, discs, facet joints, modic changes, stenosis etc.

Diabetes, overweight, inactive lifestyle, astma, smoking, sleeping



Low back pain 1

What low back pain is and why we need to pay attention

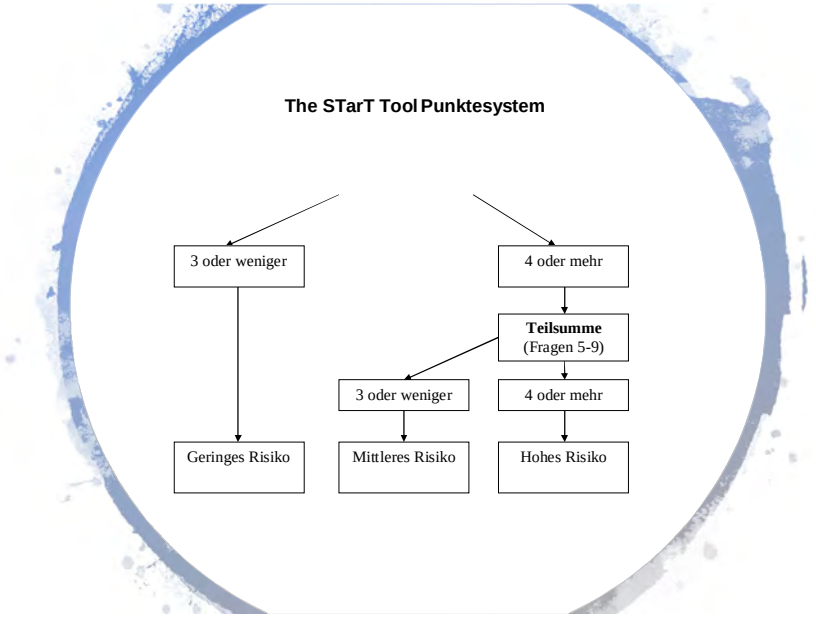
Work, Family, support

Genetics and epigenetics

Depression, catastrophizing, fear avoidance, iatrogenic factors

Stratification

- Red Flags
- Yellow flags
- Level of Disability
- Disability questionnaires – ODI / RMQ
- Risk factors for chronicity
- Örebro short version
- Start back tool



ACP American College of Physicians — Clinical Guideline

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

Ann Intern Med. February 2017.

..... Low cost treatments should be preferred.....!

Erweiterte Therapieoptionen
Options thérapeutiques élargies

Vorsitz: Hannu Luomajoki	Présidence: Hannu Luomajoki
10:20 Einführung, Evidenz und klinische Einordnung Hannu Luomajoki	10:20 Introduction, preuves et classification clinique Hannu Luomajoki
10:30 «Wie viel Diagnostik braucht die Therapie?» McKenzie Konzept – Klinische Subgruppen anstatt Strukturdiagnostik Reto Genucci	10:30 «Sur quel niveau de diagnostic doit se fonder le traitement?» Le concept de McKenzie – des sous-groupes cliniques plutôt qu'un diagnostic structurel Reto Genucci
10:50 Spiraldynamik Martin Pielok	10:50 Méthode Spiraldynamik Martin Pielok
11:10 «Manuelle Medizin und die Feldenkrais-Methode – Kongruenzen – Differenzen» Sven H. Michelsen	11:10 «La médecine manuelle et la méthode Feldenkrais – congruences – différences» Sven H. Michelsen
11:30 Der gesunde Rücken als Spiegelbild eines gesunden Lebens mit Pilates Pilates in der Therapie: Grundlagen und Anwendungen Alexander Bohlander	11:30 Une vie saine pour un dos en bonne santé avec le Pilates L'intérêt du Pilates dans le traitement: bases et applications Alexander Bohlander