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Categorization & Primary Management of Low Back Pain

Module 2

SSEP PRESENTS

Low Back Pain
Overview

SSEP PRESENTS

1. Acute & Chronic LBP
2. Primary health care providers remain the first point of contact and guide assessment & diagnosis
3. Exercise Physiologists will assist with patient care across the Acute – Chronic pain continuum

Diagnostic triage for low back pain: a practical approach for primary care.

Bardin, L. D., King, P., & Maher, C. G. (2017). Medical journal of Australia, 206(6), 268-273.

SSEP PRESENTS

Diagnostic triage for low back pain: a practical approach for primary care

Lynn D Bardin[1,2], Peter King[3], Chris G Maher[4]

One in seven Australians (13.6%) will suffer from back pain on any day,[1] which makes this condition the largest contributor to the burden of disease in Australia, according to the Global Burden of Disease Study.[2] In Australia, low back pain (LBP) is the most common musculoskeletal condition for which patients consult general practitioners.[3] Back problems are more common in older people, and with an ageing Australian population, the 3.7 million GP encounters for LBP in 2012–2013[3] are likely to escalate. Given this context, GPs need a practical approach to assess and treat their patients with LBP.

A key step in the primary care management of LBP involves a diagnostic triage that classifies patients into three broad categories (Box 1). Based on a focused clinical assessment, patients are classified as having a specific spinal pathology (< 1%), radicular syndrome[5] (ie, nerve root pathology including spinal canal stenosis; ~ 5–10%), and non-specific LBP ([NSLBP]; 90–95%). The triage approach informs decisions about the need for further diagnostic workup (eg, imaging or laboratory tests), guides the care the GP needs to provide and helps the GP identify the patients who require referral to allied health or medical specialists.[4]

This article aims to outline the diagnostic triage approach in greater detail than that found in clinical practice guidelines,[3-5] and to show the clinical utility of the approach for the primary care management of LBP. We identified relevant current English language clinical guidelines and publications from the Cochrane Library and PubMed in February 2016, our existing records, and citation tracking. We used search terms for LBP and key concepts in our article (eg, differential diagnosis, low back pain, sciatica and spinal stenosis).

Summary

- Diagnostic triage is an essential guideline recommendation for low back pain (LBP), which is the most frequent musculoskeletal condition that general practitioners encounter in Australia. Clinical diagnosis of LBP — informed by a focused history and clinical examination — is the key initial step for GPs, and determines subsequent diagnostic workup and allied health and medical specialist referral.
- The goal of diagnostic triage of LBP is to exclude non-spinal causes and to allocate patients to one of three broad categories: specific spinal pathology (< 1% of cases), radicular syndrome (~ 5–10% of cases) or non-specific LBP (NSLBP), which represents 90–95% of cases and is diagnosed by exclusion of the first two categories. For specific spinal pathologies (eg, vertebral fracture, malignancy, infection, axial spondyloarthritis or cauda equina syndrome), a clinical assessment may reveal the key alerting features. For radicular syndrome, clinical features distinguish three subsets of nerve root involvement: radicular pain, radiculopathy and spinal stenosis.
- Differential diagnosis of back-related leg pain is complex and clinical manifestations are highly variable. However, distinctive clusters of characteristic history cues and positive clinical examination signs, particularly from neurological examination, guide differential diagnosis within this triage category.
- A diagnosis of NSLBP presumes exclusion of specific pathologies and nerve root involvement. A biopsychosocial model of care underpins NSLBP; this includes managing pain intensity and considering risk for disability, which directs matched pathways of care.
- Back pain is a symptom and not a diagnosis. Careful diagnostic differentiation is required and, in primary care, diagnostic triage of LBP is the anchor for a diagnosis.

Diagnostic triage for primary care management of low back pain

The goal of the diagnostic triage for LBP is to exclude non-spinal causes of LBP and to allocate patients to one of three categories that subsequently direct management (Box 1). A focused history and a physical examination of the patient form the cornerstone to the diagnostic triage classification; moreover, diagnosis of the largest NSLBP group is by exclusion of the other two categories (Box 1).

We describe the approach endorsed in the latest clinical practice guidelines and suggest some updates based on research published subsequent to the guidelines. Limited but essential background information is provided for stepwise application of the diagnostic triage.

Specific spinal pathology

The initial step is to recognise that in primary care, LBP is occasionally the initial symptom of a number of more serious specific spinal pathologies (Box 1), the most common of which is vertebral fracture (Box 2). A range of clinical features or red flags (eg, age > 50 years or presence of night pain) have been proposed to help clinicians identify patients with a higher probability of specific pathology, who require further diagnostic workup to allow a definitive diagnosis. While there are scores of red flags endorsed in texts and guidelines, many are of limited or no value. A good illustration is the red flag "thoracic pain", which has both a positive and negative likelihood ratio of 1.0 (for cancer), meaning that both a positive and negative test result are uninformative.[6] Based on two recent Cochrane reviews, only a small subset of red flags (ie, older age, prolonged corticosteroid use, severe trauma and presence of a contusion or abrasion) are informative for detection of fracture, and a history of malignancy is the only red flag increasing the likelihood of spinal malignancy.[6]

For patients with suspected specific spinal pathology, the condition itself dictates the next steps the GP should take (Box 2). Patients with rapidly deteriorating neurological status or a presentation suggesting cauda equina syndrome require urgent (same day) referral to a neurosurgeon. Where there is suspicion of infection (such as a spinal epidural abscess that may have important medico-legal implications if missed) or strong suspicion of cancer or fracture, the GP should initiate further diagnostic

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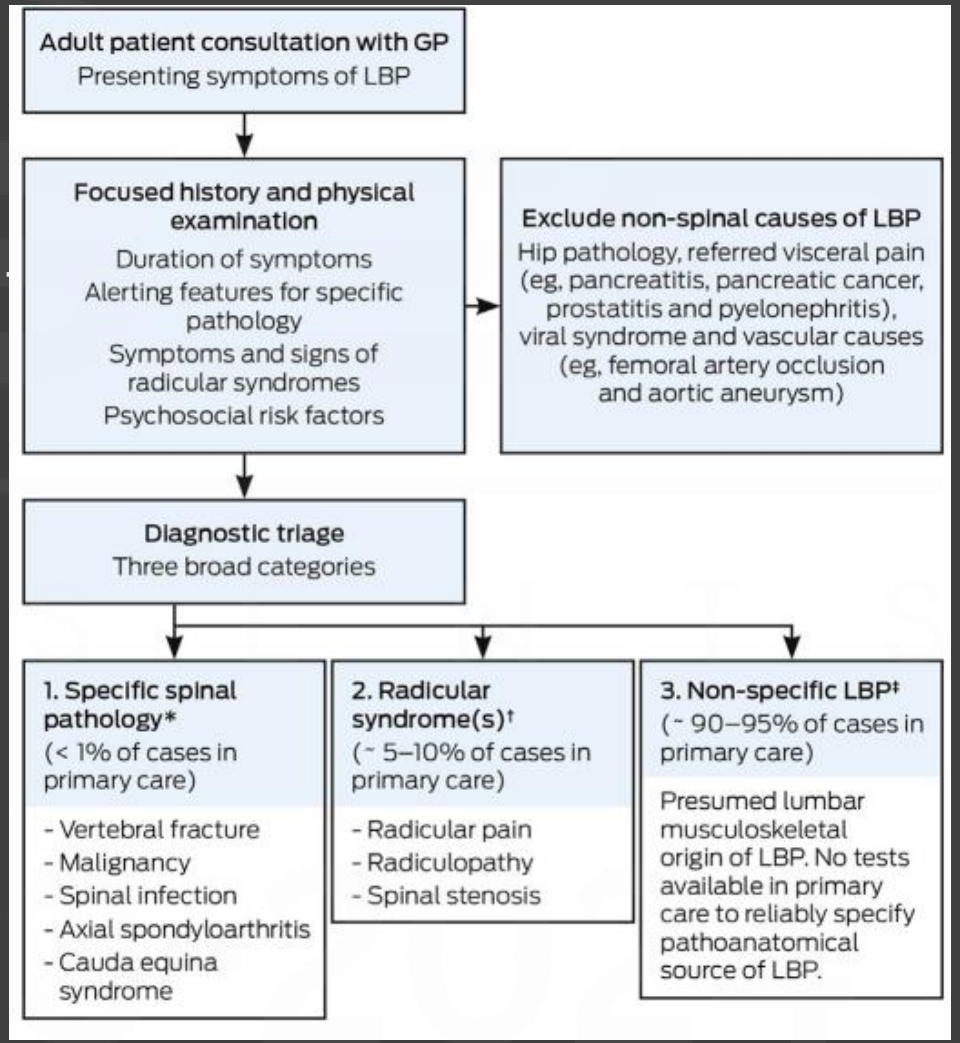
Kiely, J. [illegible] -driven? International journal of sports physiology and performance, 7(3), 242-250.

Categorisation of Low Back Pain (1) Medical Journal Australia

Bardin, L. D., King, P., & Maher, C. G. (2017). Diagnostic triage for low back pain: a practical approach for primary care. *Medical journal of Australia*, *206*(6), 268-273.



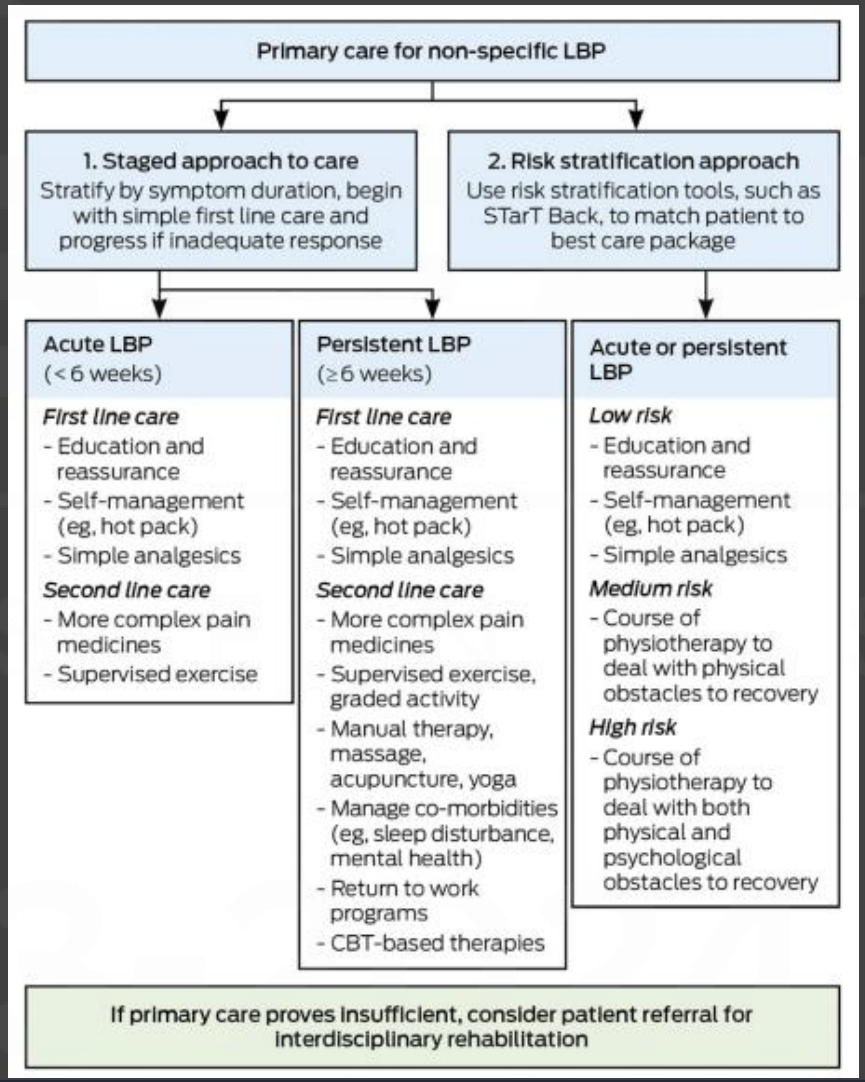
Categorisation of Low Back Pain (2) Medical Journal Australia

Bardin, L. D., King, P., & Maher, C. G. (2017). Diagnostic triage for low back pain: a practical approach for primary care. *Medical journal of Australia*, *206*(6), 268-273.

1. Specific spinal pathology* (< 1% of cases in primary care)	2. Radicular syndrome(s)† (~ 5–10% of cases in primary care)	3. Non-specific LBP‡ (~ 90–95% of cases in primary care)
- Vertebral fracture - Malignancy - Spinal infection - Axial spondyloarthritis - Cauda equina syndrome	- Radicular pain - Radiculopathy - Spinal stenosis	Presumed lumbar musculoskeletal origin of LBP. No tests available in primary care to reliably specify pathoanatomical source of LBP.

Categorisation of Non-Specific Low Back Pain (3) - Medical Journal Australia

Bardin, L. D., King, P., & Maher, C. G. (2017). Diagnostic triage for low back pain: a practical approach for primary care. *Medical journal of Australia*, *206*(6), 268-273.



SSEP PRESENTS

The Lancet: Non-specific low back pain. The Lancet

Maher, C., Underwood, M., & Buchbinder, R. (2017) – 389 (10070), 736-747.

Seminar

Non-specific low back pain

Chris Maher, Martin Underwood, Rachelle Buchbinder

Non-specific low back pain affects people of all ages and is a leading contributor to disease burden worldwide. Management guidelines endorse triage to identify the rare cases of low back pain that are caused by medically serious pathology, and so require diagnostic work-up or specialist referral, or both. Because non-specific low back pain does not have a known pathoanatomical cause, treatment focuses on reducing pain and its consequences. Management consists of education and reassurance, analgesic medicines, non-pharmacological therapies, and timely review. The clinical course of low back pain is often favourable, thus many patients require little if any formal medical care. Two treatment strategies are currently used, a stepped approach beginning with more simple care that is progressed if the patient does not respond, and the use of simple risk prediction methods to individualise the amount and type of care provided. The overuse of imaging, opioids, and surgery remains a widespread problem.

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Introduction

Low back pain is a symptom rather than a disease. Like other symptoms, such as headache and dizziness, it can have many causes. The most common form of low back pain is non-specific low back pain. This term is used when the pathoanatomical cause of the pain cannot be determined.

Epidemiology, risk factors, and costs

In a 2008 review of the worldwide prevalence of low back pain, which included 165 studies from 54 countries, the mean point prevalence was estimated to be 18·3%, and 1-month prevalence 30·8%.[1] Low back pain was more common in female than male individuals and in those aged 40–69 years than in other age groups. Prevalence was greater in high-income countries (median 30·3% [IQR 16·9–46·6]) than middle-income (21·4% [10·6–38·6]) or low-income (18·2% [0·8–21·7]) countries, but there was no difference in prevalence between rural and urban areas. The study reported a positive correlation between a country's human development index and overall mean prevalence of low back pain (r=0·088; p<0·001).

Low back pain is the leading cause of years lived with disability in both developed and developing countries, and sixth in terms of overall disease burden (disability-adjusted life-years).[2,3] Many people with low back pain do not seek care; a review of ten population-based studies (13 486 people) reported a pooled prevalence of care-seeking of 58% (95% CI 32–83).[4] Care-seeking is more common in women, and in individuals with previous low back pain, poor general health, and with more disabling or more painful episodes.[4]

The long-held belief that childhood low back pain is rare has been dispelled during the past decade. A study of 402 406 adolescents from 28 countries found that 37·0% (95% CI 36·8–37·1) reported low back pain monthly or more frequently.[5] Low back pain was slightly more common in girls than boys (38·9% *vs* 35·0%). Prevalence increased with age, ranging from 27·4% (95% CI 27·2–27·7) in 11-year-olds, to 37·0% (36·7–37·2) in 13-year-olds, to 46·7% (46·5–47·0) in 15-year-olds. Across the 28 countries, prevalence ranged from around 28% (Poland, Lithuania, and Russia) to 51% (Czech Republic). Low back pain in childhood predicts low back pain in adult life. A study of 10 000 Danish twins reported that those who had low back pain in adolescence were twice as likely to have it as adults (odds ratio [OR] 2·0 [95% CI 1·7–2·4]).[6]

We analysed data regarding risk factors for developing low back pain that were derived from systematic reviews of cohort studies. A review of lifting at work identified that both the weight of the load (OR 1·11 [95% CI 1·05–1·18] per 10 kg lifted) and the number of lifts (OR 1·09 [1·03–1·15] per ten lifts per day) increased risk.[7] In terms of lifestyle factors, smoking (OR 1·30 [1·16–1·45]),[8] obesity (OR 1·53 [1·22–1·92]),[9] and depressive symptoms (OR 1·59 [1·26–2·01])[10] all increased the risk of developing low back pain. These risk factors increased the odds of back pain by only a modest amount.

Comparison of estimates of the total, direct (health care), and indirect (lost production and lost household productivity) costs of low back pain between different countries is difficult. Even studies estimating costs for the same country and year come to widely different estimates—for example, two estimates of the indirect costs in the USA for 1996 were US$18·5 billion and US$28·2 billion.[11] Low back pain is a major contributor to health-care costs; typically, indirect costs are much higher than direct costs. An Australian estimate of the total cost in 2001 was AUS$9 billion, with only

Search strategy and selection criteria

We searched the Cochrane Library and PubMed for reports published in English from database inception until Feb 13, 2016, with the term "low back pain" and each heading in our Seminar (eg, "differential diagnosis"). Additionally, we identified current clinical guidelines, searched our existing records for relevant publications, and examined the reference lists of studies retrieved by the searches. We gave particular emphasis to clinical guidelines and systematic reviews over primary studies. Radicular pain (sciatica) is not discussed in this Seminar.

SSEP PRESENTS

Kiely, J. (20 ...on-driven? International journal of sports physiology and performance, 7(3), 242-250.

The Lancet series on low back pain: reflections and clinical implications. British Journal of Sports Medicine

O'Sullivan, K., O'Sullivan, P. B., & O'Keeffe, M. (2019). 53(7), 392-393.

Editorial

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]

The Lancet series of papers on low back pain (LBP)[1–5] received considerable attention and stimulated much discussion. We fully endorsed key messages from international guidelines. Box 1 highlights some of the series' key messages. The series illustrated international, multidisciplinary consensus on management of LBP. The series provides the reader with a comprehensive review of the most promising solutions, ranging from stratified care approaches to the delivery of treatment through integrated health and occupational care, changes to payment systems and legislation, as well as public health and prevention strategies. This is important as all too often, guidelines and systematic reviews focus on the effectiveness, or lack thereof, of particular treatment options in isolation, without considering the broader context within which treatments are delivered. Here, we reflect on three issues from the series and discuss the clinical implications.

REFLECTIONS

1. *Should we really be trying to prevent LBP?* As laudable, and obvious, as aiming to prevent LBP is, this does not seem to be supported by data. Episodes of LBP are a 'predicament of life' which will happen to most people at some point in time. It may not be useful to spend lots of money trying to prevent episodes of LBP, most of which are short term and not associated with major impact or disability. Furthermore, the drive to prevent LBP may somewhat reinforce the notion that LBP is a dangerous, scary thing which indicates something serious might be wrong with your body. Instead, helping patients, and society, reconceptualise LBP as being more like other common complaints like tiredness, sadness and constipation may be helpful. Episodes of LBP can be quite unpleasant, but typically short-lasting and rarely serious situations. Our efforts might be better focused on helping people deal well, and simply, with acute episodes of these, and help prevent persistent disability, which is the real burden. This approach could still emphasise the importance of factors that may help to protect individuals against persistent LBP and other health complaints.
2. *Is exercise really that effective?* As physiotherapists, it is satisfying to see the continued emphasis placed on non-pharmacological care for LBP, particularly advice to stay active and do exercise for persistent LBP is growing. However, the effect sizes for advice to stay active or exercising are relatively small, and it is not clearly better than other treatment options. In other words, the recommendations for exercise and activity are more based on the safety, low cost and other general health benefits rather than due to any major effect on LBP-related pain or disability. Exercise might also have value in offering some support while other treatments are wound down, leading to riskier, expensive options. Therefore, we should not rest on our laurels and think exercise alone is the solution to LBP. Indeed, we need to hold exercise to a similar standard of critical appraisal as pharmacological and surgical interventions, where more rigorous placebo-controlled trials are considered the norm. Preferable. Instead, exercise offers a good foundation on which we might add other effective treatments.
3. *How long do we keep searching for the tissue 'source' of pain?* The proposed statement that it is not yet possible to accurately identify 'the specific nociceptive source of LBP' assumes that there is a source to find. It assumes that we will explain the problem of LBP—one that we have not found it yet. How does trying to find the 'source' of LBP fit with the evidence/concept of pain as an emergent property of the person, rather than an 'input' from tissues? While there are very few who would argue that tissue nociception plays no role in LBP,[6] or that high-quality aetiological and diagnostic studies could not help us understand pain, many clinicians and staff discussed how tissue 'input' can be modified according to the responsiveness of the central nervous system and that 'the advances with the greatest potential reduce focus on spinal abnormalities'. We are slightly concerned that further attempts to identify pain sources will be further reductionist steps to a biomedical model of pain that may make it distancing how contextual health conditions are linked to LBP and whether treatment of LBP needs to be aligned with addressing these other health complaints where possible.

Box 1 Lessons from the Lancet low back series

- 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 (including exercise) should be the 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 primary, secondary and tertiary care, 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.
- We need to change widespread misconceptions about the cause, prognosis and effectiveness of different treatments for LBP.

CLINICAL IMPLICATIONS FOR RECOMMENDED TREATMENT OPTIONS

These key treatment options which are recommended, and relevant to the [illegible]

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Lessons from the Lancet low back series – As per O'Sullivan et al. (1)

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Box 1 Lessons from the Lancet low back series

- Low back pain (LBP) is a major global challenge, and back-related disability is rising.
- 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, workplace, insurance, policy, 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.
- We need to change widespread misconceptions about the cause, prognosis and effectiveness of different treatments for LBP.

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Lessons from the Lancet low back series – As per O'Sullivan et al. (2)

- Non-pharmacological treatments such as advice and activity should be first-line options in the treatment of non-specific LBP
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Editorial

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

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Lessons from the Lancet low back series – As per O'Sullivan et al. (3)

► 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

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Maher, C., Underwood, M., & Buchbinder, R. (2017) – 389 (10070), 736-747.

Seminar

Non-specific low back pain

Chris Maher, Martin Underwood, Rachelle Buchbinder

Non-specific low back pain affects people of all ages and is a leading contributor to disease burden worldwide. Management guidelines endorse triage to identify the rare cases of low back pain that are caused by medically serious pathology, and to require diagnostic work-up or specialist referral, or both. Because non-specific low back pain does not have a known pathoanatomical cause, treatment focuses on reducing pain and its consequences. Management guidelines recommend advice to remain active, exercise, multidisciplinary biopsychosocial rehabilitation, and so on. The clinical course of low back pain is often favourable, thus many patients require little if any formal medical care. Two treatment strategies are currently used, a stepped approach beginning with more simple care that is progressed if the patient does not respond, and the use of simple risk prediction methods to individualise the amount and type of care provided. The overuse of imaging, opioids, and surgery remains a widespread problem.

Introduction

Low back pain is a symptom rather than a disease. Like other symptoms, such as headache and dizziness, it can have many causes. The most common form of low back pain is non-specific low back pain. This term is used when the pathoanatomical cause of the pain cannot be determined.

Epidemiology, risk factors, and costs

In a 2008 review of the worldwide prevalence of low back pain, which included 165 studies from 54 countries, the mean point prevalence was estimated to be 18·1%, and 1-month prevalence 30·8%.[1] Low back pain was more common in women, and prevalence increased with age until aged 40–45 years then in other age groups. Prevalence was greater in high-income countries (median 30·3% [IQR 16·9–46·4]) than middle-income (19·4% [10·6–38·4]) or low-income (18·2% [8·8–21·7]) countries, but there was no difference in prevalence between rural and urban areas. The study reported a positive correlation between the human development index and the 1-month crude prevalence of low back pain (r=0·408; p=0·003).

Low back pain is the leading cause of years lived with disability in both developed and developing countries, and the number of years lived with disability has substantially increased in recent decades.[2] Many people with low back pain do not seek care; a review of ten population-based studies (11 846 people) reported a pooled prevalence of care-seeking of 58% (95% CI 32–83).[3] Care-seeking is more common in women, and in individuals with previous low back pain, poor general health, and with more disabling and severe symptoms.[4]

The long-held belief that childhood low back pain is rare has been dispelled during the past decade. A study of 402 466 adolescents from 28 countries found that 37·0% (95% CI 36·8–37·3) reported low back pain monthly or more frequently.[5] Low back pain was slightly more common in girls than boys (39·5% vs 35·0%), and prevalence was 11·3% (95% CI 11·1–11·5) at 11 years (95% CI 27·2–27·7) in 11-year-olds, to 37·8% (36·7–37·1) in 13-year-olds, to 46·7% (46·1–47·4) in 15-year-olds. Across the 28 countries, prevalence ranged from around 20% (Poland, Lithuania, and Russia) to 51% (Czech Republic). Low back pain in childhood predicts low back pain in adult life. A study of 10 000 Danish twins reported that those who had low back pain in adolescence were twice as likely to have it as adults (odds ratio [OR] 2·1 [95% CI 1·3–2·4]).

Comparison of estimates regarding risk factors for developing low back pain that were derived from systematic reviews of cohort studies. A review of lifting at work identified that both the weight of the load (OR 1·11 [95% CI 1·05–1·18] per 10 kg lifted) and the number of lifts (OR 1·09 [1·03–1·15] per ten lifts per day) increased risk. In terms of lifestyle factors, smoking (OR 1·38 [1·21–1·57]) and obesity (OR 1·55 [1·28–1·87]) and depressive symptoms (OR 1·55 [1·26–1·92])[6] also increased the risk of developing low back pain. These risk factors increased the odds of back pain by only a modest amount.

Comparison of estimates of the total, direct (health care), and indirect (lost productivity and lost household productivity) costs of low back pain between countries is difficult. Even studies estimating costs for the same country and year come to widely different estimates—for example, two estimates of the indirect costs in the USA for 1996 were US$18·5 billion and US$100·7 billion.[7] Because indirect costs are usually related to health-care costs, typically, indirect costs are much higher than direct costs. An Australian estimate of the total cost in 2001 was AU$9·9 billion, with only

Search strategy and selection criteria

We searched the Cochrane Library and PubMed for reports published in English from database inception until Feb 12, 2017, using the search terms "low back pain" and "sciatica" (and synonyms, eg, "differential diagnosis"). Additionally, we identified current clinical guidelines, searched our existing records for relevant publications, and examined the reference lists of studies retrieved by the searches. We gave particular emphasis to clinical guidelines and systematic reviews and primary studies. Radicular pain (sciatica) is not discussed in this Seminar.

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Change the narrative of LBP & Promote evidence-based care of LBP

- Key treatment options include:
  - ✓ Exercise
  - ✓ Education
  - ✓ Psychological Interventions

- The Lancet Series help to educate & guide health professionals.

Kiely, J. (2012). Periodization paradigms in the 21st century: evidence-led or tradition-driven?. International journal of sports physiology and performance, 7(3), 242-250.

Most Recent Recommendations 22-23

The Low Back Pain Clinical Care Standard 2022

The Australian Commission on Safety and Quality in Health Care.

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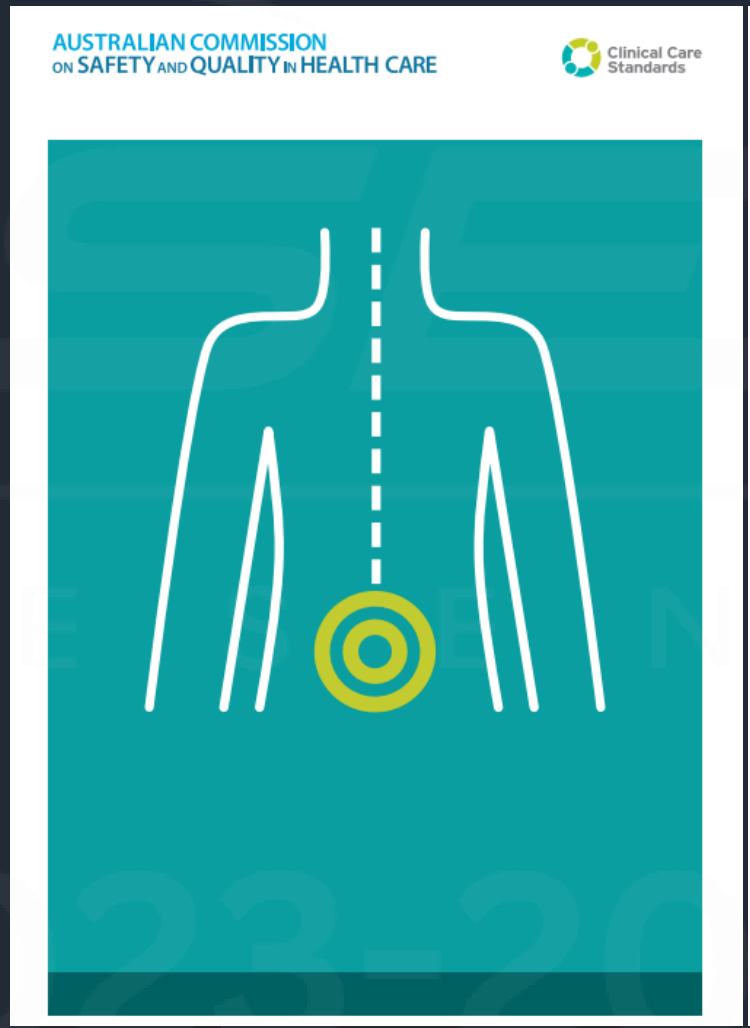

Kiely, J. (2012). Periodization paradigms in the 21st century: evidence-led or tradition-driven? International journal of sports physiology and performance, 7(3), 242-250.

Medical/Physiotherapy Diagnosis & Management – The Low Back Pain Clinical Care Standard

The Australian Commission on Safety and Quality in Health Care – The Low Back Pain Clinical Care Standard 2022

Clinical Assessment

- The clinical care standard determines back pain in 2 main Categories – Severe Low Back Pain (Serious Pathology) > Medical Referral & Chronic or Persistent Low back Pain (and /or Acute – low risk) > Allied Health Management

Psychological Assessment

- Focus is put on screening and assessing for psychosocial factors that may affect their recovery
- These identified factors will be helpful to determine complexity of required supports

Review & Referral

- This will be based of an individual's low back pain assessment, category of back pain and psychological assessment. Appropriate referral to medical care or allied health management will be completed by GP or Primary Care Provider.

SSEP PRESENTS

Quick Guide: Initial Management
The Low Back Pain Clinical Care Standard

The Australian Commission on Safety and Quality in Health Care – The Low Back Pain Clinical Care Standard 2022 – Quick Guide Presented by Physio INMotion May 23

1 Conduct an initial clinical assessment

ASSESS patients early in each new presentation of low back pain. Including:

- A targeted history (pain, past history, functional capacity, health comorbidities and features that may indicate specific and/or serious pathology)
- A physical examination to assess movement, functional capacity and pain interference
- A focused neurological examination for patients with low back pain with leg pain.

ARRANGE

- Appropriate referral/investigations if specific and/or serious underlying pathology is suspected
- Follow-up for monitoring or further assessment.

REFER

- **Immediately to emergency department (ED) for suspected cauda equina compression, spinal infection or acute severe neurological deficit**
- **To GP if suspicious of malignancy, spondyloarthropathy or aortic aneurysm**
- **For imaging if suspicious of a fracture.**

DOCUMENT findings in the patient's medical record.

2 Assess for psychosocial factors

SCREEN using risk assessment tools (STaRT Back or Örebro).

ASSESS for factors which may delay recovery on first assessment.

- Use findings on risk assessment tools (STaRT Back or Örebro) to identify risk status and prompt discussion
- Explore: patient's concerns, beliefs, pain-related fears, avoidance and protective behaviours, pain-related distress, lifestyle factors and social stressors (including financial, family, relationship and work, and any legal involvement)
- Consider history of mental health problems
- If distress appears severe, ask the patient about suicidal ideation and whether they have a plan.

REFER

- **Immediately to GP in the case of suicidal ideation or acute severe emotional distress**
- **Immediately to ED in the case of suicidal ideation with a plan.**

DOCUMENT findings and repeat the assessment at subsequent visits to measure progress.

3 Reserve imaging for suspected serious pathology

ADVISE that imaging:

- Is important to identify serious pathology (~1% of patients in primary care, likely higher in ED)
- Is not indicated for people with low back pain in the absence of features indicating the presence of serious pathology (95+% of people) and is not helpful as it won't change how their back pain condition is managed
- Can create unnecessary concerns where normal age-appropriate findings are mislabelled as pathology
  - For example, imaging findings such as disc degeneration, facet joint arthritis, disc bulges, fissures and protrusions are common in people without pain and are a normal feature of ageing
- Monitor for changes in presentation that indicate a sinister pathology where imaging is required.

REFER a patient with alerting features for serious pathology or suspicion of fracture (as outlined above).

NOTE MRI offers better sensitivity and a superior safety profile.

EXPLAIN radiological findings and any relevance to their clinical presentation/management, if patient has been imaged.

4 Provide patient education and advice

ADVISE patients about the:

- Positive natural history of low back pain and the low risk of serious underlying disease
- Importance of engaging in relaxed, graded movement and activity, return to work and social activities. These movements may initially be sore, but they will gradually improve with time
- Importance of good sleep habits and stress management where relevant.

EXPLAIN that a specific diagnosis is not possible for most low back pain because there are many interacting factors that influence the pain experience, and the lower back area has numerous structures that can become sensitive that are difficult to isolate.

- Movement will not cause harm. There are no 'bad' movements or postures and there is no need to avoid certain movements once you have recovered
- Heat packs for home may provide short-term pain relief, as an adjunct to active management
- The potential benefits, risks and costs of any treatment strategies being considered.

PROVIDE written explanations and tailored educational resources (including links to websites) to reinforce key messages and repeat at subsequent visits.

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Quick Guide: Initial Management
The Low Back Pain Clinical Care Standard

The Australian Commission on Safety and Quality in Health Care – The Low Back Pain Clinical Care Standard 2022 – Quick Guide Presented by Physio INMotion May 23

5 Encourage self-management and physical activity

ADVISE that:

- It is important to maintain or gradually return to normal activities including normal spinal movement, physical activity, a graded return to work and/or meaningful activities
- **Prolonged bed rest delays recovery and should be discouraged.**

SUPPORT patients to self-manage their symptoms by:

- Prioritising active management strategies over passive strategies, guided by the evidence base
- Mapping out a plan to help the patient engage in graded movement and activity, return to work and social activities
- Gradually increasing activity levels based on their preference, using time-contingent pacing
- Setting SMART goals.

6 Offer physical and/or psychological interventions

Based on the findings from the psychosocial/risk assessment:

ADVISE that active coping strategies directed at optimising physical and psychological health can enhance recovery.

PROVIDE patient-specific reassurance, guidance on self-management and advice to stay active. This may include:

- Helping the patient develop a positive mindset and understanding about their pain condition based on the findings from the screening questionnaires, interview and examination
- Time-limited manual therapy may provide short-term pain relief, as an adjunct to active management
- A program of regular graded exercise therapy and physical activity to relieve pain, and build confidence to reengage with normal movement and activities in line with their goals
- Promoting healthy sleep habits and relaxation techniques
- A plan for social engagement and return to work
- Resources including patient stories.

REFER to GP where severe pain results in acute distress and significant activity limitation for review and pain management.

7 Use pain medicines judiciously

Physiotherapists generally cannot provide patients with specific advice on pain medication.

REFER to a GP for pain management if the patient's level of pain is severe, distressing or a barrier to functional recovery. Seek advice from the GP or community pharmacist if you are concerned about the regimen of medicines the patient is taking.

ADVISE that the goal of pain medicines is to reduce pain to support continuation of usual activities including physical activity and work, rather than to eliminate pain completely.

PROVIDE information about how pain medicines may be combined with physical activity and self-management strategies to help improve function and mobility.

COMMUNICATE with the GP:

- How physiotherapy care can support active management and clear goals to stop medication
- If you are concerned about medication side effects, abuse or overdose.

8 Review and refer

If the patient's pain is persisting or worsening:

REASSESS to reconsider diagnosis, assess for alerting features (red flags) and review psychosocial factors and engagement with self-management strategies.

ADVISE that the goal of pain medicines is to reduce pain to support continuation of usual activities including physical activity and work, rather than to eliminate pain completely.

ARRANGE referral to ED if new concerning features are identified (serious pathologies, severe neurological deficits or cauda equina symptoms).

REFER a patient with disabling back or leg pain, and/or significantly limited function on review at 2–6 weeks to:

- **GP** for review and pain management
- **Specialist physiotherapy** for patients who present with high levels of pain-related fear and distress, avoidance and protective behaviours
- **Psychologist** for patients who present with psychological comorbidities, for example unresolved trauma, high levels of anxiety, distress, depression or social stress. Use screening such as the DASS or K10 to assist identification of these
- **ED** where there is suicidal ideation with a plan
- **Imaging and surgical review if severe or progressively deteriorating neurological signs and symptoms.**

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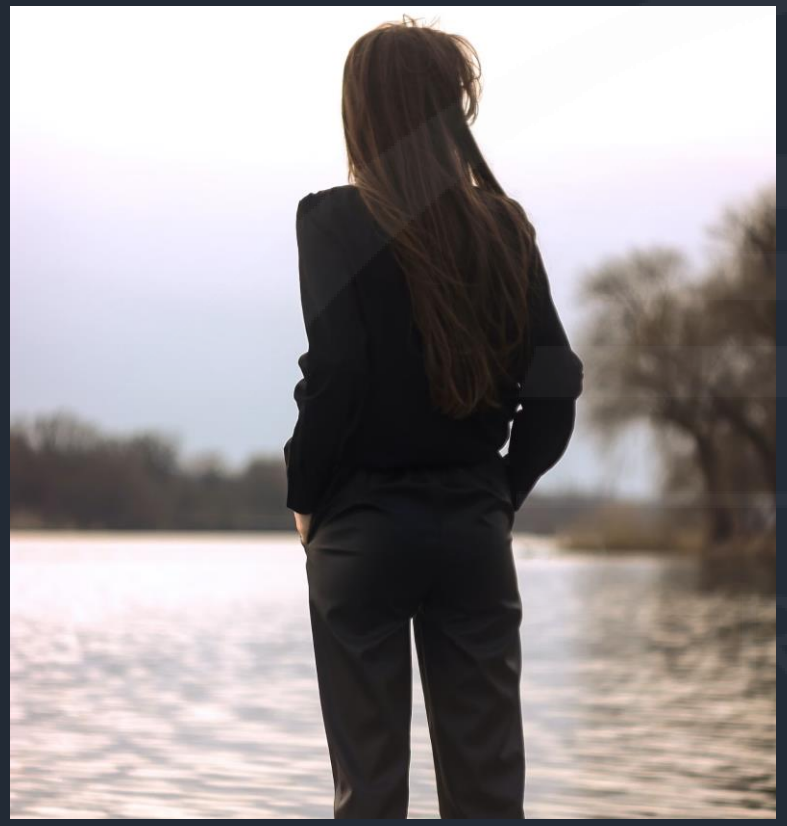
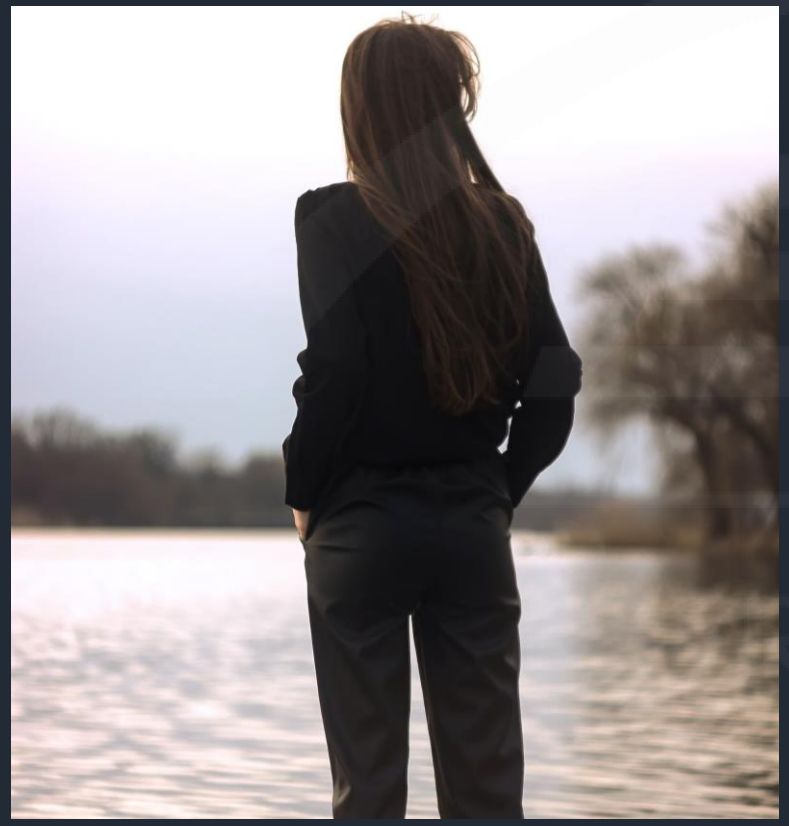


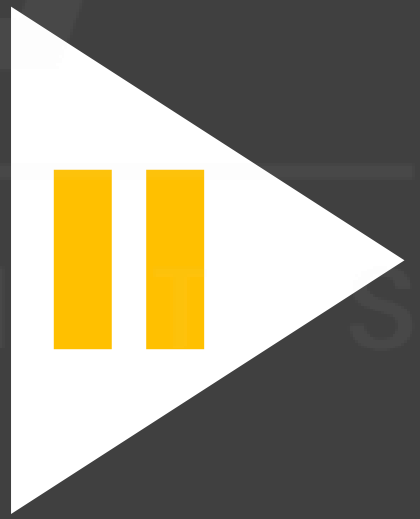
SSEP PRESENTS

Review of Learning #2 Primary Management

- 58yr old Female with widespread Osteoarthritis has been sent to Exercise Physiology via a GP referral for lower back pain
- She reports having a fall at home 3 weeks ago and nil previous episodes of lower back pain, she states that you are the first person she has seen since the fall although things are improving
- She reports she is also suffering from bilateral knee pain and advised her doctor she would like to be able to do more walking to help with her recent episode of lower back pain



Review of Learning #2
Primary Management



Due to her reported MOI and lack of clinical assessment what would best practice in this situation, what advice or education would you give to her regarding walking or exercise?

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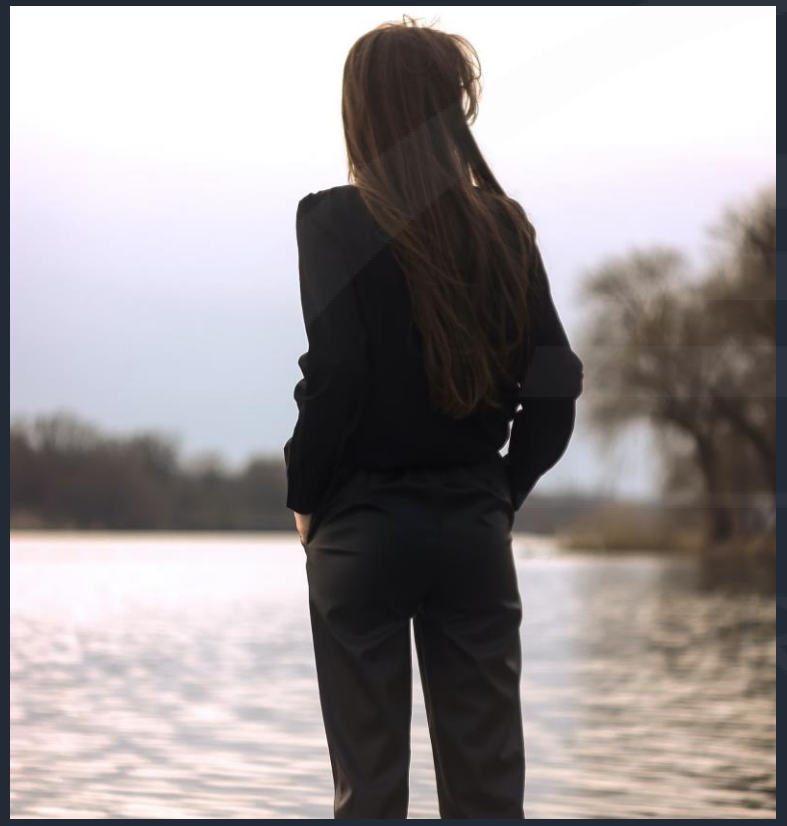

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Review of Learning #2 Primary Management

- Advise it would be best practice to see a Physiotherapist to provide a more detailed clinical assessment
- Due to her reporting of improving symptoms and eagerness to return to walking, reassure her that most episodes of low back pain can be managed via suitable exercise and self-management strategies
- Upon clearance and advice/education from the primary care provider we can then start to develop an appropriate exercise program to assist with reducing LBP and improve capacity due to OA joint pain

Epidemiology of Back Pain Globally and in Australia & Categorization & Primary Management of Low Back Pain

Quiz 1

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