SORTING OUT LOW BACK PAIN

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HOW TO MANAGE A PATIENT WITH LOW BACK PAIN IN YOUR PRACTICE

WHEN TO REFER YOUR PATIENT TO RPH OR ANOTHER SPINAL CLINIC
LOW BACK PAIN

SCIATICA/ RADICULOPATHY

Feb 2017
Low Back Pain

• Common in Adult Population
  Up to 80% of population.

CLBP: > 3 months: 10-16% of pop.

• Often Self-Limiting
NON SPECIFIC LOW BACK PAIN

(Mechanical Low Back Pain)

‘Pain between lower ribs and gluteal folds’.

(Nachemson, 1992)
NATURAL HISTORY OF LOW BACK PAIN

GOOD PROGNOSIS

80% of patients will recover within 2 weeks
LOW BACK PAIN

• 80% of cases due to non-specific LBP of population experience LBP of cases resolve after 2 weeks
LOW BACK PAIN
SPECIFIC CAUSES

DISCOGENIC
FACET
SACRO ILIAC
MYOFASCIAL PAIN
RED FLAGS
EXTRA SPINAL (AORTIC ANEURISM)
LOW BACK PAIN : RED FLAGS!

EXCLUDE ‘T.I.N.T’

TUMOUR

INFECTION (Discitis, TB) INFLAMATION (Spondylitis)

NEUROLOGICAL (root, cord, plexus)

TRAUMA (Fracture, Lumbar instability)
Inflammatory arthritic conditions
Includes ankylosing spondylitis, psoriatic arthritis.

1. Consider inflammatory cause for **back pain** greater than 3 months' duration if 4 out of 5 of these criteria are present.²
   - Onset of **back** discomfort aged < 40 years
   - Insidious onset
   - Improvement with exercise
   - No improvement with rest
   - **Pain** at night (with improvement on arising)

2. Arrange investigations – CRP and HLA-B27 and if positive, plain X-ray.

3. Marked improvement **in pain** with NSAID may increase suspicion of ankylosing spondylitis.
Risk of Acute LBP becoming CLBP

Yellow Flags are best predictors: C.H.A.M.P.S

Catastrophising
Hyper vigilance
Anxiety
Medically focussed
Passive coping
Stress, Substance abuse, smoking, sick of work
Risk of Acute LBP becoming CLBP

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20% RISK!
Consider:

- asking yellow flag questions, or
- using a screening tool to help predict those at risk of chronic pain and disability.

### Screening tools

Useful to categorise patients into low, medium, and high risk, to identify where early individualised support (e.g., physical and psychological therapies) will aid long-term recovery:

- **Örebro Musculoskeletal Pain Screening Questionnaire** is useful in the early phase of assessment to predict long-term disability and failure to return to work. A score > 50/100 predicts an increased risk of future work disability. For more information, see Örebro University – FAQs and scoring instructions.

- The Keele STarT Back Screening Tool helps establish who may be at low, medium, or high risk of ongoing distress from their low back pain symptoms. They may benefit from seeing a physiotherapist with an interest in pain and psychological approaches (augmented or advanced practice physiotherapist).

  - The pain self-efficacy questionnaire (PSEQ) assesses the confidence that people with pain have in performing activities while in pain. It can help predict people who may be more at risk of long term pain and disability.

Consider repeating the questionnaire at different intervals to measure progress.
BACK PAIN IN CHILDREN AND ADOLESCENTS

TRADITIONALLY THOUGHT THAT MOSTLY ‘ORGANIC’ CAUSES IN CHILDREN

BUT

RECENT EVIDENCE SUGGESTS INCREASING NUMBER HAVE ‘NONSPECIFIC’ BACK PAIN
Review Article

Evaluation and Diagnosis of Back Pain in Children and Adolescents

Suken A. Shah, MD
Jeremy Saller, MD

Abstract
Although traditionally it has been accepted that back pain in young children and adolescents most often has an organic etiology, nonorganic back pain in this population is becoming more common. The most common identifiable clinical entities responsible for such pain are spondylolysis, spondylolisthesis, Scheuermann kyphosis, overuse syndromes, disk herniation, apophyseal ring fracture, spondylodiscitis, vertebral osteomyelitis, and neoplasm. Appropriate clinical workup leads to earlier diagnosis and management of back pain and avoids unnecessary cost. Knowledge of the most common diagnoses associated with back pain in children and adolescents and the use of a systematic method to select the appropriate diagnostic tests can help the clinician to minimize costs and maximize the likelihood of making the correct diagnosis and providing appropriate treatment.
MANAGEMENT OPTIONS

- Manipulation
- Pharmacist
- Psychiatrist
- Surgery
- Orthotics
- Physical Therapy
- Brace
- Traction
- REST
- Back School
- Chemo
- Neuraxis
- Gym Exercise
- Compensation
- Litigation
Using the history and your examination, categorise your patient into one of three groups:

- Non Specific LBP = Mechanical Lumbar Back Pain:
  - Sciatica
  - Other

**GIVE POSITIVE ADVICE**

Use investigations wisely to confirm a diagnosis, not to make a diagnosis. The value of imaging in the first four weeks of an episode of back pain is questionable.

**DO NOT** advise patients to rest. Commence early active exercise programme.
Surgical Management of Nonspecific Chronic Low back pain

Selection of Patient Remains Controversial (cf Sciatic Pain).
CURRENT RECOMMENDATIONS FAVOUR NONINVASIVE, NONSURGICAL TREATMENT OF CLBP

EG. SPINAL SURGERY MEDICARE BENEFITS SCHEDULE ITEM NUMBER REVIEW 2018:

SPINAL FUSION FOR ‘UNCOMPPLICATED LOW BACK PAIN’ MAY NOT BE FUNDED
HOW TO MANAGE A PATIENT WITH LOW BACK PAIN IN YOUR PRACTICE

WHEN TO REFER YOUR PATIENT TO RPH OR ANOTHER SPINAL CLINIC
SEVERE BACK PAIN;
UNABLE TO COPE
PREV. EXTENSIVE NONOPERATIVE TREATMENT,
AND EXERCISE PROGRAM

NEUROLOGICAL SYMPTOMS;
RADICULOPATHY/SCIATICA
CAUDA EQUINA SYNDROME

ROYAL PERTH HOSPITAL HAS TRIAGE SYSTEM
FOR AXIAL SPINAL PAIN PATIENTS

INITIAL ASSESSMENT BY EXPERIENCED PHYSIOTHERAPIST
Low Back Pain in Adults

This pathway is for patients who present with musculoskeletal low back pain (with or without leg pain), to identify and manage those at risk of chronic low back pain.

About low back pain (LBP)

- Low back pain is a very common problem.
  - Approximately 80% of people will experience low back pain at some stage in their lives.
  - 94% of back pain presentations in Australian primary care are for non-specific low back pain (NSLBP).
- It is usually not possible to identify the cause of most back pain.
- Patients will improve with time and conservative management.
  - Most improvement in pain and disability occurs in the first six weeks after the onset of symptoms.
  - After 6 weeks, improvement continues but at a slower rate.
  - > 75% patients pain-free, or with minimal pain and disability at one year.¹
- Patients with ongoing pain at 4 to 6 weeks may benefit from multidisciplinary management to reduce the risk of long-term pain.
Assessment

Practice Point!
- Serious causes for low back pain in general practice are rare (< 1%).
- The cause of most low back pain cannot be identified and imaging correlates poorly. Avoid imaging for acute low back pain unless red flags or other serious underlying conditions are suspected.

1. Take a focused history:
   - Pain
   - Other symptoms or alerting features for specific pathology e.g., weakness
   - Functional capacity

2. Perform an examination:
   - Screening neurological examination.
   - Blood pressure, weight, and BMI.
2. Perform an examination:
   - Screening neurological examination.

**Screening neurological examination**

This may include undressing the patient to allow examination.

- Gait, sit to stand, squatting, heel walk, and toe walk
- Inspection of lower back including:
  - lordosis (loss or increased)
  - range of movement (flexion, extension, side bend, and rotation)
- Hip movement (common differential diagnosis)
- Localised spinal tenderness
- Lower limb for motor weakness, reflexes, and sensation – check:
  - inversion of foot (L4) and dorsiflexion of great toe (L5)
  - sensation (light touch and pin prick) over lateral foot and posterior calf
  - knee (L4) and ankle (S1) reflexes

Consider which dermatome may be involved.

- Straight leg raise test and hip examination

See also bpacNZ – Five-minute Back Examination With Neurological Assessment.
The FABER test
The Flexion, Abduction, and External Rotation (FABER) test is used to detect hip or sacro-iliac joint problems. The patient lies in a supine position, and the foot is placed on the opposite knee; in this position groin pain indicates a hip problem rather than a spinal problem. The doctor then presses on the flexed knee and on the opposite anterior superior iliac crest; pain in the sacroiliac area indicates a problem with sacroiliac joints (Figure 1).

Figure 1: FABER test from Bernstein R and Cozen H 2007²
RED FLAGS!

3. Exclude serious underlying conditions that require urgent investigations or intervention.
   - Spinal cord compression or **cauda equina syndrome**
   - **Severe neurological deficits**
   - **Spinal fracture following trauma**
   - **Spinal infection**
   - **Spinal cancer** or presence of risk factors
   - **Vertebral compression fracture**
   - **Inflammatory arthritis**
4. Assess **yellow flags** – psychosocial risk factors that may indicate the need for further assessment and intervention. Consider:

- asking **yellow flag questions**, or
- using a **screening tool** to help predict those at risk of chronic pain and disability.

5. Determine the most likely diagnosis:

- **Non-specific low back pain (NSLBP)** (94% of LBP presentations in Australian primary care).
- Back pain potentially associated with **radiculopathy** or **spinal stenosis** (usually with persistent and disabling referred leg pain).

6. Investigations:

- **Imaging** – not routinely indicated.
- Pathology – consider arranging FBE, ESR, CRP, calcium, tumour markers, if red flags.

7. If patient with recurrent or persisting **low back pain**, consider asking them to fill in and bring back to next appointment a [Pain Assessment Questionnaire](#).
Management

Practice Point!
Patients with non-specific acute low back pain (including radiculopathy and spinal canal stenosis) are more appropriately managed in the community and most will improve over time with simple management strategies, avoiding potentially harmful and costly treatments and tests.
Request

- Request **emergency assessment** for:
  - neurosurgical spinal emergencies:
    - acute cauda equina syndrome – acute loss of bladder/bowel function.
    - suspected acute spinal cord compression with rapidly progressive paralysis (e.g., spinal tumours with rapidly progressive neurological impairment, pathological fractures, rapidly progressive myelopathy with neurological deterioration).
    - suspected epidural abscess especially if there is associated neurological deterioration.
    - history of significant trauma with acute neurological deterioration.
  - abdominal aortic aneurysm (AAA) or other visceral pathology.
- If persistent low back pain and/or radicular symptoms > 6 weeks, not responding to physical therapy and other simple pain management, request intensive interdisciplinary persistent pain program if available, or a specialist pain assessment.

- If not responding to intensive interdisciplinary persistent pain program, request specialist pain assessment.

- Consider requesting non-acute neurosurgery assessment if the patient is fit and willing to consider surgery, and has persistent, severe, and disabling low back pain accompanied by:
  - symptoms of stenosis – severe neurogenic claudication i.e., walking limited by onset of pain and/or weakness.
  - stable/gradual progressive motor signs, or sensory loss.
  - persisting severe radicular pain > 12 weeks with confirmatory findings.

In the referral include the clinical picture, any relevant neurological symptoms or signs and history for triage purposes.

- For nerve sheath/epidural steroid injection or facet joint blocks, refer to an experienced and appropriately qualified specialist.
Thank you