10-minute consultation

Acute low back pain

Josip Car, Aziz Sheikh

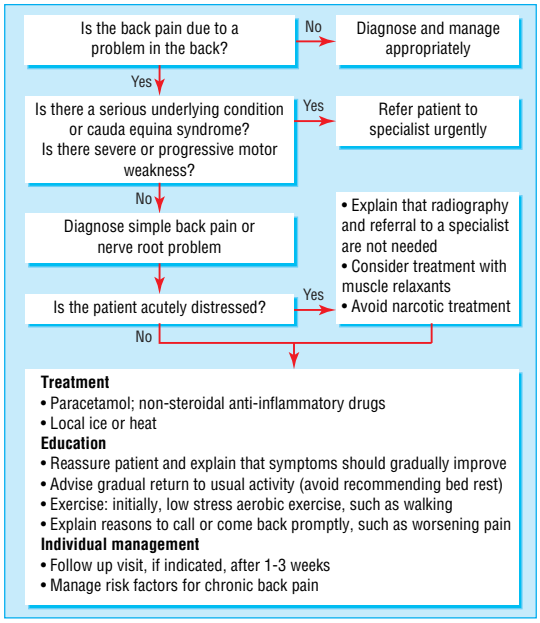
A 43 year old man awoke a few hours ago with severe lower back pain, which radiates into his right buttock and is made worse by movement. He had been gardening the previous day.

What issues you should cover

- Are his symptoms due to a back problem? Back symptoms may also be due to pain referred from other organ systems (such as the abdomen, the vascular system, or the genitourinary tract) or a systemic illness.
- Be alert to the possibility of rare but potentially serious underlying causes. "Red flag" features include non-mechanical pain, thoracic pain (possible dissecting aneurysm), unexplained weight loss or history of carcinoma (possible metastases), fever (possible osteomyelitis), previous use of systemic corticosteroids (possible osteoporotic collapse), and presentation in patients aged less than 20 years or more than 55 years.
- Are nerve roots involved?
- Is there cauda equina syndrome? Indicative features are difficulty with micturition, loss of anal sphincter tone, faecal incontinence, saddle anaesthesia, and widespread or progressive motor weakness of the legs, sensory loss, or gait disturbance.
- Is the pain currently under control? Establish what treatments he has already tried and with what effect.
- Check for risk factors for chronic disorder. A history of back problems, pain radiating down the leg, poor physical fitness, and concurrent psychosocial or socioeconomic problems increase the risk of chronic illness.

What you should do

- Examine him to differentiate between simple back pain, nerve root pain, possible serious spinal pathology, referred pain from other organ systems, and systemic disease.
- If he has symptoms of nerve root involvement, a more detailed motor, sensory, and reflex examination of his legs is warranted. If he has severe or progressive motor weakness refer him for orthopaedic (or neurosurgical) assessment.
- Cauda equina syndrome is a surgical emergency. Patients with indicative symptoms need urgent specialist assessment and, possibly, surgical neurodecompression.
- If simple back pain is diagnosed, explain that radiography is not needed and that typically symptoms gradually resolve. Advise him on how he can minimise the risk of exacerbating the problem (such as avoiding heavy lifting), when to contact you (when pain worsens, when existing symptoms fail to improve in 2-4 weeks, or when new symptoms develop), and when to return to work. Advise against daytime bed rest, and stress the importance of maintaining activity levels. Give him written information on the condition.
- Suggest possible analgesics (paracetamol or non-steroidal anti-inflammatory drugs, for example), and explain that taking them regularly rather than when required may be more effective. Physiotherapy can be an effective alternative or addition to drugs. If he asks about other treatments (spinal manipulation, massage, traction, acupuncture, electrical nerve stimulation, electromyographic biofeedback, temperature treatments), explain that evidence for their effectiveness is limited.
- It is uncertain whether identifying risk factors for chronic back pain improves clinical outcomes. Despite a lack of evidence, it is reasonable to try to minimise any detrimental effect on prognosis by addressing these factors (such as treating underlying depression).
- Emphasise the need for physical activity and "back hygiene" to minimise the risk of further back problems, including close attention to posture when standing and sitting and techniques for bending and lifting. An appropriate mattress and weight loss may also help.
- Be optimistic: emphasise the usually benign course of simple low back pain. Such encouragement may enhance recovery.



This is part of a series of occasional articles on common problems in primary care

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Useful reading

Buchbinder R, Jolley D, Wyatt M. Population based intervention to change back pain beliefs and disability. *BMJ* 2001;322:1516-20.

Kendrick D, Fielding K, Bentley E, Kerslake R, Miller P, Pringle M. Radiography of the lumbar spine in primary care patients with low back pain: randomised controlled trial. *BMJ* 2001;322:400-5.

Tulder M, van Koes BW. Low back pain and sciatica: acute. In: *Clinical evidence*. London: BMJ Publishing, 2002: 1156-70. (Issue 8.)

Waddell G, McIntosh A, Hutchinson A, Feder G, Lewis M. *Low back pain: evidence review*. London: Royal College of General Practitioners, 1999.