Acute Low Back Pain

Diagnostic Triage

Diagnostic triage is the differential diagnosis between:

- Simple backache (non specific low back pain)
- Nerve root pain
- Possible serious spinal pathology

Simple backache: ***specialist referral not required***

- Presentation 20-55 years
- Lumbosacral, buttocks & thighs
- "Mechanical" pain
- Patient well

Nerve root pain: ***specialist referral not generally required within first 4 weeks, provided resolving***

- Unilateral leg pain worse than low back pain
- Radiates to foot or toes
- Numbness & paraesthesia in same distribution
- SLR reproduces leg pain
- Localised neurological signs

Red flags for possible serious spinal pathology: ***prompt referral (less than 4 weeks)***

- Presentation under age 20 or onset over 55
- Non-mechanical pain
- Thoracic pain
- Past history-carcinoma, steroids, HIV
- Unwell, weight loss
- Widespread neurology
- Structural deformity

Cauda equina syndrome: ***immediate referral***

- Sphincter disturbance
- Gait disturbance
- Saddle anaesthesia

The evidence is weighted as follows:

★★★ Generally consistent finding in a majority of acceptable studies.

★★ Either based on a single acceptable study, or a weak or inconsistent finding in some of multiple acceptable studies.

★ Limited scientific evidence, which does not meet all the criteria of 'acceptable' studies

Principal Recommendations

Assessment

- Carry out diagnostic triage (see left).
- X-rays are not routinely indicated in simple backache.
- Consider psychosocial factors.

Drug Therapy

- Prescribe analgesics at regular intervals, not p.r.n.
- Start with paracetamol. If inadequate, substitute NSAIDs (eg ibuprofen or diclofenac) and then paracetamol-weak opioid compound (eg codydramol or coproxamol). Finally, consider adding a short course of muscle relaxant (eg diazepam or baclofen).
- Avoid narcotics if possible.

Bed Rest

- Do not recommend or use bed rest as a treatment for simple back pain.
- Some patients may be confined to bed for a few days as a consequence of their pain but this should not be considered a treatment.

Advice on Staying Active

- Advise patients to stay as active as possible and to continue normal daily activities.
- Advise patients to increase their physical activities progressively over a few days or weeks.
- If a patient is working, then advice to stay at work or return to work as soon as possible is probably beneficial.

Manipulation

- Consider manipulative treatment within the first 6 weeks for patients who need additional help with pain relief or who are failing to return to normal activities.

Back Exercises

- Patients who have not returned to ordinary activities and work by 6 weeks should be referred for reactivation / rehabilitation.

Evidence

★ Diagnostic triage forms the basis for referral, investigation and management.

★ Royal College of Radiologists Guidelines.

★★★ Psychosocial factors play an important role in low back pain and disability and influence the patient's response to treatment and rehabilitation.

★★ Paracetamol effectively reduces acute low back pain.

★★★ NSAIDs effectively reduce simple back ache. Ibuprofen and diclofenac have lower risks of GI complications.

★★ Paracetamol-weak opioid compounds are effective when NSAIDs or paracetamol alone are inadequate.

★★★ Muscle relaxants effectively reduce acute back pain.

★★★ Bed rest for 2-7 days is worse than placebo or ordinary activity and is not as effective as alternative treatments for relief of pain, rate of recovery, return to daily activities and work.

★★★ Advice to continue ordinary activity can give equivalent or faster symptomatic recovery from the acute attack and lead to less chronic disability and less time off work.

★★★ Within the first 6 weeks of onset, manipulation can provide short-term improvement in pain and activity levels and higher patient satisfaction.

★★ The evidence is inconclusive that manipulation produces clinically significant improvement in chronic low back pain.

★★ The risks of manipulation are very low in skilled hands.

★★★ It is doubtful that specific back exercises produce clinically significant improvement in acute low back pain.

★★ There is some evidence that exercise programmes and physical reconditioning can improve pain and functional levels in patients with chronic low back pain, and theoretical arguments for starting this by 6 weeks.