Chronic low back pain: a practical checklist

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Affecting 10% of the population, chronic low back pain (CLBP) lasts at least three months and may radiate into the buttock, thigh, groin, flank or abdomen. Leg pain (referred from musculoskeletal structures) is associated in 20% of cases. True radicular leg pain ('sciatica') is far less common (5%). 'Non-specific CLBP', where no specific cause is identified, accounts for 80% of cases.

Specific causes (where a 'pain generator' is identified) include: internal disc disruption; facet or sacroiliac arthropathy; myofascial pain; cluneal neuropathy; 'red flags' such as a vertebral fracture, metastases or discitis (IVDU); other pathology (pelvic, visceral or renal disease, aortic aneurysm, shingles); and also pregnancy.

Triggers include work or sports-related physical activities (e.g. lifting, twisting, straining, repetitive tasks). Acute back pain becomes chronic in 20% of cases and risk factors for this transition include psychosocial stressors ('yellow flags'), family history, spinal surgery, high BMI, lack of physical fitness, and smoking.

Management requires a multimodal, multidisciplinary approach based on the checklist below.

- ☐ Are there "red flags'? Exclude T.I.N.T - tumour, inflammation (spondylitis), infection (discitis), neurological problems (root, cord, plexus) and trauma (fracture, lumbar instability). Examine for features suggesting radicular leg pain or central spinal stenosis (straight leg raise, slump test, neurological signs, claudication). Order an MRI or CT if concerned. Severe radicular leg pain or neurological symptoms warrant urgent MRI and neurosurgical review.
- ☐ 'Yellow flags' are the best predictors of CLBP and disability (C.H.A.M.P.S): catastrophising, hyper vigilance, anxiety, medically focused, passive coping, stress, substance/medication overuse, smoking and sick-of-work.
- ☐ Inform patient about realistic outcomes and functional goals. Reassure about imaging findings ('hurt doesn't equal harm'). Encourage 'de-medicalisation' of life, visit the *PainHealth* website and enrol in a pain program.
- ☐ Useful analgesics (some used off label) include paracetamol, tramadol, tapentadol, transdermal buprenorphine, duloxetine or pregabalin (for radicular pain), celecoxib (pain flare ups), and NSAID gel. Physical therapies include activity-pacing, walking, exercises (strength and stretching, core-stability), ergonomics (e.g. workplace), acupuncture, hot or cold packs and TENS.

- ☐ Antidepressants and clinical psychology for anxiety and stress (catastrophic thoughts, feelings of injustice and frustrations). Manage drug and alcohol problems, medication-overuse and smoking. Assist with injury rehabilitation and compensation claims.
- ☐ Identify specific pain generators (e.g. myofascial trigger points) and consider local anaesthetic (LA) injection, dry needling or physiotherapy.
- ☐ Cluneal neuropathy (10% of CLBP): Pain (often unilateral) in buttock and thigh, tenderness over superior iliac crest, altered toothpick sensation over buttock. Consider injection of LA and steroid over iliac crest ('12 noon') and pulsed radiofrequency treatment.
- ☐ Facet joints (20-40% of CLBP): L4/5 and L5/S1 joints implicated in 90% of cases, so imaging is unhelpful for diagnosis. If over 60, consider facet joint injections or medial branch (facet) nerve blocks of these joints (treat most painful side first), with follow-up radiofrequency treatments ('rhizotomies') if required.
- ☐ Radicular leg pain (90% L5 or S1 root) and central spinal canal stenosis (over 60, back and leg pain, claudication) are clinical and radiological (MRI/CT) diagnoses. Consider ordering a transforaminal epidural steroid injection (specifically NOT a nerve root sleeve injection) in the former, facet joint procedures (not epidural steroid) in the latter or surgical decompression if needed. Consider LA and steroid injection for sacroiliac joint pain.
- ☐ Review regularly and monitor response. ●

References available on request

Author competing interests: Dr Visser has received honoraria for education or research funding support for the Churack Chair from BioCSL-Seqirus, Pfizer, Servier, Mundipharma, Janssen, Boston Scientific, Nevro and St Jude in the past five years. Questions – contact the author on 9400 9020.