Chronic Low Back Pain: A practical checklist approach.

- ✓ Chronic low back pain (CLBP) is pain of at least three months duration in the lower back region, which may also radiate into the buttock, thigh, groin, flank or abdomen.
- ✓ LBP is associated with leg pain in 20% of cases
  - -mainly *referred* from spinal musculoskeletal structures.
  - -true radicular leg pain ('sciatica') is far less common (5%).
- ✓ CLBP affects 10% of the population; that's 2.2 million (mainly middle-aged) Australians right now.
- ✓ Back pain is the world's leading cause of chronic pain and disability.
- ✓ Accounts for 10% of GP visits.
- ✓ Major driver of workers' compensation and disability claims, costing Australians up to 10 billion dollars per year.
- ✓ Despite its prevalence, a specific cause for LBP is not identified in 80% of cases and is classified as *'non-specific CLBP'*.

- ✓ *Specific* causes of LBP (where a 'pain generator' is identified) include
  - Internal disc disruption (40%)
  - Facet arthropathy (20-40%)
  - Sacroiliac arthropathy (10%)
  - Myofascial pain (10%)
  - Cluneal neuropathy (10%)
  - Red flags' (5%) or other pathology (pelvic, visceral or renal disease, aortic aneurysm, shingles), pregnancy.

- ✓ LBP triggers: Mainly work or sports-related physical activities (lifting, twisting, straining, repetitive tasks).
- ✓ In 20% of cases, acute back pain transforms into chronic LBP.
- ✓ Risk factors for this transition include psychosocial stressors ('yellow flags') (see C.H.A.M.P.S), chronic pain, family history, spinal surgery, high BMI, lack of physical fitness and smoking.
- ✓ Management of CLBP requires a multimodal, multidisciplinary approach.

CLBP checklist

☐ Exclude **'r**ed flags'

- T.I.N.T: **T**umour, **I**nflammation (spondylitis), **I**nfection (discitis), **N**eurological (root, cord, plexus, cauda equina syndrome) and **T**rauma (fracture, lumbar instability).
- Thoracolumbar MRI if concerned.
- Severe radicular leg pain or neurological symptoms warrant urgent MRI and neurosurgical review.

☐ Examination: Are there features suggesting radicular leg pain or central spinal stenosis?

- Straight leg raise < 30^{o}, + slump test, neurological signs, claudication.
- MRI (CT) if concerned.

☐ Identify 'yellow flags'

- These are the BEST predictors for developing CLBP and disability.
- C.H.A.M.P.S: **C**atastrophizing, **H**ypervigilance, **A**nxiety, **M**edically-focus, **P**assive-coping, **S**tress, **S**ubstance/medication-overuse, **S**moking, **S**ick-of-work.

- Arrange for pain education and psychosocial care (see below).

□ Identify and manage simple 'pain generators'

- Myofascial trigger points (lumbosacral angles, gluteals)—local anaesthetic (LA) injection, dry needling or physiotherapy.
- Greater trochanteric bursitis (lateral thigh pain & tenderness)—ultrasound-guided injection with LA & steroid.

□ Pain education and promote positive key messages

- Inform patient about realistic outcomes and functional goals.
- Reassure about imaging findings and that 'hurt doesn't equal harm'.
- Encourage 'de-medicalisation' of their lives.
- Focus on reducing catastrophic thoughts, feelings of injustice and frustrations.

□ Patient should visit the *PainHealth* website and engage in a pain program.

□ Useful analgesics are

- Tramadol
- Tapentadol
- Duloxetine (for back & radicular pain)
- Pregabalin (for radicular pain)
- Paracetamol
- Transdermal buprenorphine
- Celecoxib (pain flare ups)
- NSAID gel
- Avoid long-term opioid analgesia if <60 years of age

□ Physical therapies involve activity-pacing, walking, exercises (strength and stretching) ergonomics (posture, pillows), hot or cold packs, TENS and acupuncture.

□ Psychosocial care for anxiety and stress includes clinical psychology and antidepressants. Manage drug & alcohol problems, medication-overuse and smoking. Assist with injury rehabilitation and compensation claims.

□ Identify specific pain generators (joint or nerve blocks are part of the diagnostic process in CLBP).

□ Cluneal neuropathy

- Pain (often unilateral) in buttock and thigh, tenderness over superior iliac crest, altered toothpick sensation over buttock.
- Injection of LA and steroid over iliac crest and pulsed radiofrequency treatment.

□ L4/5 and L5/S1 facet joints

- Imaging unhelpful for diagnosis.
- Nearly always L4/5/S1 facet joints if over 60 years of age.

- Facet joint injections or medial branch (facet) nerve blocks, with follow-up radiofrequency treatments (neurotomies or 'rhizotomies').

☐ Radicular leg pain

- A clinical and radiological diagnosis.
- Leg pain, SLR, slump test, neurology, plus MRI or CT confirmation.
- L5 or S1 root in 90% of cases.
- Transforaminal epidural steroid injection (specifically NOT a nerve root sleeve injection).
- Surgical decompression.

☐ Central spinal stenosis

- Clinical and radiological diagnosis.
- >60 years of age, back and leg pain, claudication, plus MRI or CT confirmation.
- Treat as facet joint pain.
- Surgical decompression.
- Epidural steroid injection NOT indicated.

☐ Sacroiliac joints

- LA and steroid injection.

☐ Neuromodulation: pain specialist review.

☐ Recycle through the checklist and going review to monitor response.