Diagnosis and Management of Low Back Pain (LBP)

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<tr><th>Diagnostic Criteria</th><th>Guideline-Supported Interventions</th></tr>
<tr><td>Common LBP: (e.g., non-specific, lumbar or lumbo-sacral strain/sprain, sacroiliac joint dysfunction, myofascial pain syndrome, facet joint irritation, osteoarthritis)
• 90% of cases; pain between the costal margin and inferior gluteal folds, with/without leg pain.
• Pain may be sharp, dull, shooting, or aching, often worsened by movements, with muscle stiffness/spasms.
• Pain is reproducible on physical examination testing; no neurological deficits.

LBP with Radicular Pain/Radiculopathy (from disc pathology):
• Common in younger adults; sharp, burning pain radiating from the low back down the leg in a dermatomal pattern; with numbness, tingling, weakness.
• Positive straight leg raise test, sensory deficits, muscle weakness, altered reflexes.

Deep Gluteal Syndrome (e.g., piriformis syndrome):
• Common with prolonged sitting/repetitive hip movements.
• Buttock and posterior leg pain, may radiate to the foot; worsens with sitting, stair climbing, squatting.
• Tender gluteal region with sciatic nerve irritation, no neurological deficits unless severe compression.</td><td>Goal: Reduce pain, optimize function, promote daily activity through a multimodal approach.
• Education & self-management: Highlight LBP's typically self-limiting nature with tailored guidance (written, digital, visual). Encourage exercise, nutrition, stress management, and movement (avoid bed rest). Support social/work participation; recommend mobility aids as needed. Employ SMART goals and Brief Action Planning to sustain engagement.
• Exercise: Create personalized programs for strength, mobility, and fitness.
• Manual therapy: Spinal manipulation, mobilization, soft tissue techniques.
• Psychosocial support: Screen and address barriers (e.g., fear, low recovery expectations). Offer stress management, self-efficacy resources, and refer persistent cases to medical/mental health providers.
• Medication: Short-term NSAIDs, analgesics, or muscle relaxants as needed with medical oversight; avoid long-term opioid use.
• Multimodal biopsychosocial care: Especially for persistent LBP, combine physical, psychological, and social interventions tailored to patient needs, focusing on non-pharmacologic strategies.
Ongoing follow-up: Ensure alignment with treatment goals.
Criteria for discharge/referral: Achieved goals, worsening symptoms, failed treatment (e.g., no improvement after 6-8 weeks).</td></tr>
<tr><td colspan="2">Red Flags: Immediate Emergency Care Referral</td></tr>
<tr><td colspan="2">1. Cauda Equina Syndrome: Severe pain, saddle anesthesia, bladder/bowel dysfunction, bilateral radicular signs.
2. Spinal Infection: Severe localized LBP with systemic symptoms (fever/chills), immunosuppression, recent infection/surgery, TB history, IV drug use, poor living conditions.
3. Traumatic Spinal Fracture: Sudden, severe pain following trauma.</td></tr>
<tr><td colspan="2">Red Flags: Referral to Medical Provider</td></tr>
<tr><td colspan="2">1. Spinal Fracture: Sudden severe pain, osteoporosis, corticosteroid use, female sex, age >60, history of spinal fracture/cancer.
2. Spinal Malignancy: Progressive pain, cancer history, constitutional symptoms (fatigue, weight loss).
3. Inflammatory Arthritides (e.g., ankylosing spondylitis): Morning stiffness >1 hour, systemic symptoms (fatigue, weight loss, fever), symmetrical joint pain, joint swelling/deformity.
4. Referred Pain (from abdominal/pelvic visceral conditions): Abdominal/pelvic pain/tenderness, systemic signs (fever, weight loss), GI or urinary symptoms.
5. Non-musculoskeletal peripheral neuropathy (e.g., diabetic neuropathy, Guillain-Barré syndrome): Burning, tingling, or numbness in a bilateral stocking-like distribution in the lower extremities, with sensory loss, reduced reflexes, muscle weakness, balance difficulties.</td></tr>
<tr><td>Orange Flags (Symptoms of Psychiatric Disorders)
Immediate referral: Suicidal ideation, severe distress/psychosis, harm intent.
Non-urgent referral: Persistent symptoms affecting function (e.g., anxiety).
Co-management: Triage with medical/psychiatric care, manage comorbid MSK conditions, use tools (PHQ-9, GAD-7, etc.) to guide care/escalation.</td><td>Yellow Flags (Psychosocial Factors):
• Factors: Individual (fear, low expectations), social (lack of support), socioeconomic (employment/financial stress), work stressors.
• Co-management: Provide resources (stress management, graded activity), monitor challenges, refer if persistent, use tools (PHQ-9, GAD-7, etc.) to guide care/escalation.</td></tr>
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