

Assessment of Low Back Pain (LBP)

LBP

Adult patient presenting symptoms of LBP

Focused history and physical examination

- Duration of symptoms
- Alerting features for specific pathology
- Symptoms and signs of radicular syndromes
- Psychosocial risk factors

Non-spinal causes?

- Referred visceral pain –pancreatic / urological pathologies (e.g. pancreatitis, pancreatic cancer, prostatitis, pyelonephritis)
- Vascular causes-aortic aneurysm or dissection, femoral artery occlusion, peripheral vascular disease
- Hip pathology
- Viral syndrome

Yes

**Manage /
Refer
accordingly**

No

Specific spinal pathology

(< 1% in primary care)

- Vertebral fracture
- Malignancy
- Spinal infection
- Axial spondyloarthritis
- Cauda equina syndrome

Radicular Syndrome(s)

(~ 5-10% in primary care)

- Radicular pain
- Radiculopathy
- Spinal stenosis

Non-specific LBP*

(~ 90-95 % in primary care)

- Presumed lumbar musculoskeletal origin of LBP

** No tests available in primary to reliably specify the pathoanatomical source of LBP

Management of Low Back Pain (LBP)

Non-specific LBP in primary care

Reassurance and self-management

Acute LBP

Non-pharmacological Treatment

First Line: Advice to remain active

Second Line: Exercise

Pharmacological Treatment

First Line: Simple analgesics (NSAIDs or paracetamol if no safe alternatives)

Second Line: Multiple analgesics of different classes

Chronic LBP

Non-pharmacological Treatment

First Line: Advice to remain active; Exercise

Second Line: Physiotherapy; Nutrition intervention; Psychological intervention; Multidisciplinary rehabilitation

Pharmacological Treatment

First Line: Simple analgesics (NSAIDs or paracetamol if no safe alternatives)

Second Line: Multiple analgesics of different classes

Consider referring to specialist if there are red flag symptoms (Table) or no clinical improvement

Review the progress at pre-determined intervals & reassess

Red flag warning signs

Possible diagnosis	Red flag symptoms
Cauda equina syndrome	Saddle anesthesia; Motor deficit at multiple levels; Urinary retention; Urinary / Fecal incontinence
Significant or progressive neurological deficits	Progressive motor weakness; Severe or incapacitating back or leg pain (e.g., requiring hospitalization, precluding walking, or significantly limiting activities of daily living)
Cancer	History of cancer with new onset LBP; Unexplained weight loss
Vertebral infection	Fever; IV drug use; Recent infection
Vertebral compression fracture or fracture due to acute injury	History of osteoporosis; Use of corticosteroids; Older age
Inflammatory arthritis	Morning stiffness lasting longer than 30 minutes (especially upon rising) in patient under age 40