Acute low back pain	Sub acute low back pain	Chronic low back pain
<6wk	6-12wk	>12wk

- 1. Serious spinal pathology (infection, malignancy, fracture, inflammatory causes)
- 2. Nerve root pain (sciatic nerve trapped in L/S spine, or in muscles of back or buttock that are in spasm) can take up to 2 months to resolve
- 3. Non-specific low back pain (often triggered by minor sprain or strain) usually resolves within 2 weeks

Aim to relieve pain, improve function, prevent recurrence of pain, prevent chronic pain

Assessment

- 1. Ask about red flags
- 2. Ask about nerve root pain
- 3. Examine all patients
- 4. Examine joints close to the back (eg. hip)

Review if symptoms not improving within 4-6 weeks, or if worsening. At review assess for serious spinal pathology, nerve root pain, yellow flags

Examination

- Inspection of back & spine
- Palpation of vertebral column, paraspinal muscles, gluteal muscles
- Testing for ROM of back
- Examination of the hips
- SLR and sciatic stretch test
- Tone, power, reflexes, sensation of lower limbs

Straight Leg Raise

- Positive if pain <70 deg
- Below 30 deg the sciatic nerve is not stretched if leg cannot be flexed beyond 30 deg, consider non-back cause for pain (eg OA)

Sciatic Stretch Test

 Dorsiflex foot with leg raised – test positive if further discomfort in thigh, buttock, calf. Bent knee relieves

Schober's Test

- Mark where PSIS meets vertebral column (L5)
- Mark 5cm below and 10cm above this
- Slowly bend forward, try to touch toes
- Distance between two should increase 5cm
- <5cm is positive (could indicate eg. Ank Spond, sacroiliitis, spinal deformity)

Spinal cord compression

- · Thoracic vertebra common site
- Weakness & abnormal sensation lower limbs
- Pain over vertebrae
- Urinary retention
- Faecal incontinence

The spinal cord ends at L1/2. Compression above this level causes UPPER motor neurone signs:

- Increased tone in limbs
- hypERreflexia
- UPgoing plantars

Cauda equina syndrome

- Compression of spinal cord below L2
- Cauda equina contains nerve roots of L1-5 and S1-5

Causes LOWER motor neurone signs:

- · Reduced tone in limbs
- · Absent /reduced reflexes
- DOWNgoing plantars