

MUSCULOSKELETAL BACK PAIN RED FLAGS

Red flags that suggest cauda equina syndrome include:

- Bilateral neurological deficit of the legs
 - Paresis
 - Absent reflexes- particularly ankle (S1/2)
 - Reduced 'pin prick' sensation
- Recent-onset urinary retention and/or urinary incontinence
- Recent-onset faecal incontinence
- Saddle anaesthesia or paraesthesia
- Reduced anal sphincter tone

But remember early cauda equina may present as bilateral neuropathic pain only



MRI showing L5/ S1 disc prolapse compressing the cauda equina

Red flags that suggest spinal fracture include:

- Sudden onset of severe central spinal pain, relieved by lying down
- History of major trauma e.g. fall from height landing on feet
- Even minor trauma or strenuous lifting in people with osteoporosis
- Structural deformity of the spine
- Point tenderness over the vertebral body



X-ray showing L2 wedge fracture (stable fracture)



X-ray showing L3 'burst fracture (unstable fracture). Frequently seen in fall from height landing on feet

Red flags that suggest cancer or infection (e.g. discitis, vertebral osteomyelitis, or spinal epidural abscess) include:

- Onset in people older than 50 years, or younger than 20 years of age
- Pain that remains when supine
- Aching night pain that disturbs sleep
- Thoracic back pain
- Past history of cancer
 - Cancers most likely to metastasise to the spine include breast, lung, GI, prostate, renal & thyroid
- Recent spinal procedure
- Fever, chills or unexplained weight loss with no apparent cause
- Recent infection (e.g. urinary tract infection)
- Intravenous drug abuse
- Immunocompromise such as HIV infection



X-ray showing lytic met causing loss of pedicle

Red flags suggesting spondyloarthropathy include:

- Early morning stiffness lasting >45 minutes
- Night pain
- Relieved by movement/ exacerbated by rest

Red flags that suggest a high risk of permanent damage to the compressed nerve include:

- Significant muscle weakness or wasting
- Loss of tendon reflexes
- Presence of a positive Babinski reflex (up- going plantars)



X-ray showing 'Bamboo spine' seen in ankylosing spondylitis