

MUSCULOSKELETAL

CAUDA EQUINA SYNDROME

The cauda equina begins after the conus medullaris, at the 1st or 2nd lumbar vertebrae, and contains the L1- L5 & S1- S5 nerve roots. Compression, trauma or other damage in this area can result in Cauda Equina Syndrome.

Causes:

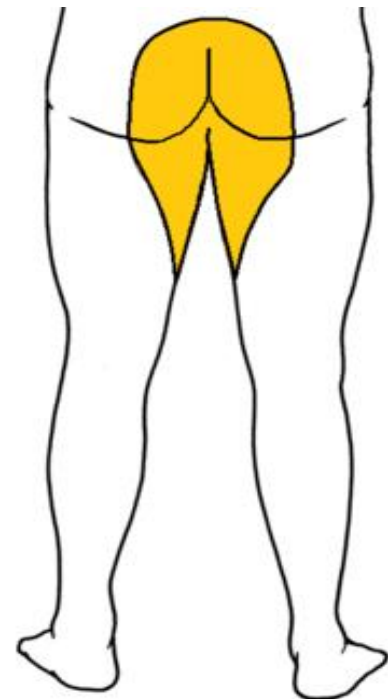
The most common cause of cauda equina syndrome is central vertebral disc prolapse. Other causes include;

- Metastatic disease
- Lumbar spinal stenosis
- Iatrogenic from lumbar puncture or spinal anaesthesia
- Burst fractures with posterior displacement
- Penetrating trauma
- Inflammatory conditions e.g. ankylosing spondylitis



Signs & Symptoms:

- Severe back pain and pain in the sciatic nerve distribution, often bilateral
- Paresis of the lower legs, may even present as acute paraplegia
- Bladder & bowel dysfunction, usually urinary retention and faecal incontinence
 - Faecal incontinence may be a late finding, it can be irreversible & is a devastating complication
- Gait disturbance
- Sexual dysfunction
- Saddle paraesthesia- S3- S5 dermatomes
- Absent ankle (Achilles) reflexes- S1 & S2 nerve roots
- Absent anal wink reflex
 - Stimulus of the perineum causes contraction of the external anal sphincter
- Reduced pinprick sensation



Examination:

Perform a full neurological examination including tone, power, sensation (including pinprick), co-ordination and reflexes. If you suspect cauda equina syndrome you **must** perform a PR examination to assess anal tone- failure to do so is negligent