

## Cauda Equina Syndrome (CES)

Cauda Equina Syndrome (CES) is a very rare but serious spinal presentation of leg pain and/or back pain that requires immediate assessment, investigation, and treatment.

### What symptoms could be suggestive of Cauda Equina Syndrome (CES)?

Patient presenting with leg pain and/or back pain with a suggestion of recent onset or deterioration of any of the following symptoms:

- difficulty initiating micturition or impaired sensation of urinary flow;
  - altered perianal, perineal or genital sensation S2-S5 dermatomes – the area may be small or as big as a horse's saddle (subjectively reported or objectively tested);
  - severe or progressive neurological deficit of both legs, such as major motor weakness with knee extension, ankle eversion or foot dorsiflexion;
  - loss of sensation of rectal fullness;
  - sexual dysfunction – inability to achieve erection or to ejaculate, or loss of genital sensation.
- *Any of these symptoms requires immediate assessment, investigation, and treatment.*
- An emergency assessment or referral to the nearest facility with Emergency MRI provision is warranted.
- Also, other warning signs needing Urgent referral-
- Sudden onset bilateral radicular leg pain (sciatica) or unilateral radicular leg pain that has progressed to bilateral without Cauda Equina Syndrome (CES) symptoms also requires urgent referral.

### Why needs immediate assessment, investigation, and treatment?

If it is unrecognised or surgical treatment is delayed, this may result in permanent loss of bladder and bowel function, loss of sexual function, and lower limb paralysis. Patients may continue to experience ongoing severe disability despite prompt treatment but, if it is treated before symptoms become severe, this can reduce the risk of permanent disability.

### Please seek help immediately-

If you develop any combination of the following symptoms (Cauda Equina Syndrome symptoms), with pain radiating down one or both legs and/or severe lower back pain -

- loss of feeling pins and needles between your inner thighs or genitals;
- numbness in or around your back passage or buttocks;
- altered feeling when using toilet paper to wipe yourself;
- increasing difficulty when you try to urinate;
- increasing difficulty when you try to stop or control your flow of urine;
- loss of sensation when you pass urine;
- leaking urine or recent need to use pads;
- not knowing when your bladder is either full or empty;
- inability to stop a bowel movement or leaking;
- loss of sensation when you pass a bowel motion;
- change in ability to achieve an erection or ejaculate;
- loss of sensation in genitals during sexual intercourse.

### Important considerations for the Evaluators / Assessors of Cauda Equina Syndrome (CES)-

- CES is a collection of patient symptoms & clinical signs (does not have a set clinical pattern).
- No single symptom or sign is pathognomonic or has good diagnostic accuracy of CES.
- Additionally, **negative physical tests do not rule out CES** if positive subjective symptoms are present.
- A magnetic resonance imaging (MRI) scan on its own cannot diagnose CES.

### Reference and some additional sources of information –

1. Please refer to “video” (<https://www.youtube.com/watch?v=FdlxfcJmn-4&t=121s>) and “warning card” (<https://www.eoemskservice.nhs.uk/advice-and-leaflets/lower-back/cauda-equina>) from the Musculoskeletal Association of Chartered Physiotherapists (MACP).
2. <https://gettingitrightfirsttime.co.uk/wp-content/uploads/2023/10/National-Suspected-Cauda-Equina-Pathway-UPDATED-V2-October-2023.pdf>
3. <https://cks.nice.org.uk/topics/sciatica-lumbar-radiculopathy/diagnosis/red-flag-symptoms-signs/>
4. <https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Cauda-Equina-Syndrome>