



Cauda Equina | The Diagnostic Problems in Emergency Medicine

In February 2020 the [Royal College of Emergency Medicine](#) published a position statement which set out clear advice to its members, who on the front line, were often faced with practical difficulties in relation to the diagnosis of cauda equina.

Cauda Equina Syndrome (CES) is a rare surgical emergency caused by narrowing of the spinal canal (usually due to a prolapsed intervertebral disc) that requires urgent specialist assessment and intervention. If the condition is not managed in a time-efficient manner, it can lead to severe permanent disabilities including permanent paralysis, permanent loss of bowel, bladder and sexual function.

The difficulty in diagnosis is that the clinical features of CES are wide-ranging and can often be dismissed or confused with simple back pain or sciatica. In addition, the onset of symptoms or deterioration can be rapid. Clinical signs are said to include:

- signs of sciatica
- a progressive neurological deficit
- urinary problems
- loss of sensation of rectal fullness and faecal incontinence
- saddle anaesthesia or paraesthesia
- laxity of the anal sphincter
- loss of sexual function

It seems that these clinical features, alone, cannot reliably confirm the diagnosis of CES. The gold standard for diagnosis is MRI.

The difficulties often faced by Emergency Practitioners historically are two-fold, firstly the apparent need to liaise with professional colleagues such as spinal surgeons before undertaking appropriate imaging and secondly difficulties in arranging MRI scans in hospitals where they are simply not available 24/7. This has meant that historically all too often diagnosis has been delayed resulting in poor outcomes for such patients and sadly on occasions paralysis.

The college recognised and agreed with statements made by [The Society of British Neurological Surgeons](#) and [British Association of Spinal Surgeons](#) that MRI had a key role to play in making the diagnosis of CES and in consequence it should be available 24/7 in referring hospitals. It noted the advice of the society that the decision to undertake an MRI scan in a patient suspected of having CES should not in fact require discussion with a spinal surgeon (a cause of delay), unless MRI was contra-indicated. Furthermore, it acknowledged that surgery in such cases should be undertaken '*at the earliest opportunity*'.

The society has, therefore, now advised its members that in cases of possible Cauda Equina Syndrome, best practice will dictate that if appropriate imaging (MRI scan) cannot be performed within 4hrs, that those cases should be referred to the local orthopaedic team for on-going care rather than leave the patient languishing in the Emergency Department waiting for tests or specialist referral.

Of some concern is the fact that in a report published by [GIRFT](#) on Spinal Services and CES it is noted that the key factor or problem in all of this is the ability of hospitals to access MRI scans 24/7. It seems that the majority of hospitals with an Emergency Department simply do not have sufficient access to MRI scans – they are not available 24/7.

Let's hope that going forward this new advice to Emergency Teams will mean that they will be more proactive in striving to obtain an MRI scan, in such cases, and if that is not possible to transfer urgently to a more specialist team.

All too often clinical negligence claims arise in relation to Cauda Equina resulting from a delay in diagnosis and in affording appropriate treatment. The consequences of potentially missing a case of CES and the possibility of litigation clearly remains of considerable concern to emergency physicians. Let's hope the position statement will help although the solution seems to be better access to timely MRI scans to assist in the diagnosis and that can only happen with funding.

If you have any queries with regard to the diagnostic problems in emergency medicine, in relation to Cauda Equina Syndrome, our [Personal Injury and Medical Negligence Team](#) can assist on 01202 786260 or online.enquires@la-law.com.