

OP05

Cauda equina syndrome in the emergency department: a 2-year retrospective review

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Abstract

Cauda equina syndrome is a rare but life-changing clinical condition in which pressure is exerted on the group of nerve roots known collectively as cauda equina.

It was first described in 1934. It has an incidence ranging from 2.7 to 4.0 per 100,000.

It is more common in women with a mean age of 42 years.

It can lead to loss of control of pelvic organs and legs, with a risk of permanent loss of sensory and motor control in the area supplied by the cauda equina.

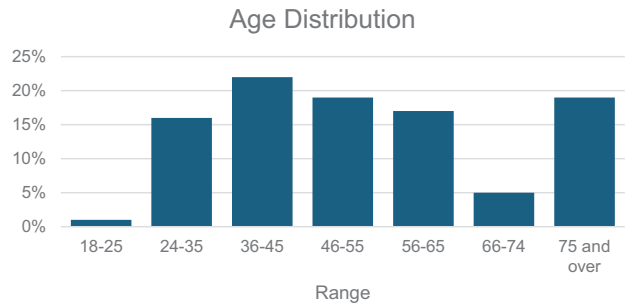


Fig. 1. Age distribution.

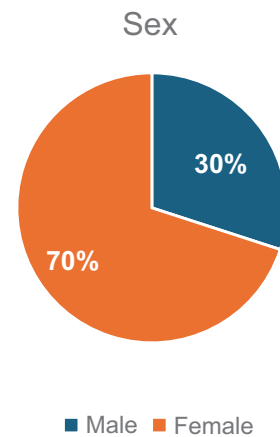


Fig. 2. Gender distribution.

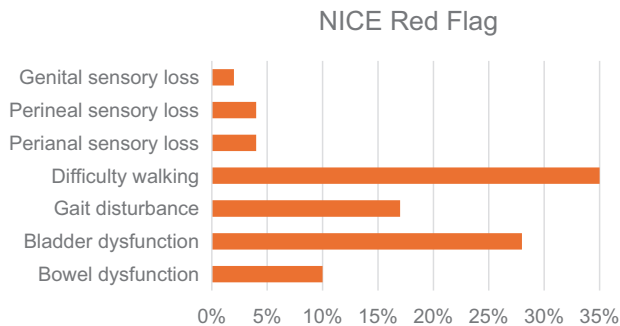


Fig. 3. National Institute for Health and Care Excellence (NICE) red flags.

Patient admitted, discharged or transferred?

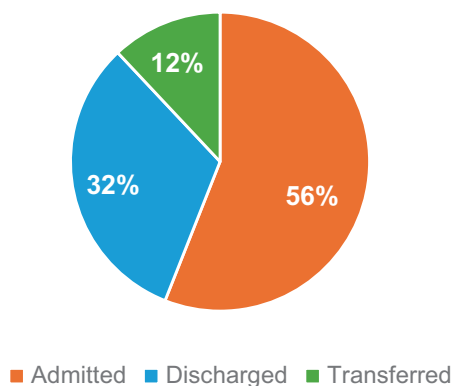


Fig. 4. Disposition.

The setting for the study was the emergency department in a Large Urban Teaching Hospital. A Retrospective Chart Review over 2 years from January 2022 to December 2023 was conducted. Adult patients aged 18 years and over presenting with suspected cauda equina syndrome (CES) were included. We found a CES prevalence of 0.07% of all ED attendances or 74 per 100,000. There was a female preponderance of 70% versus 30% male. A total of 74% of cases were aged between 24 and 65 years at one peak, and a spike after the age of 75 years. Most cases (92%) were managed conservatively. A total of 100 patients (68%) were admitted or transferred, while 32% were discharged. A total of 140 patients (95%) met the National Institute for Health and Care Excellence (NICE) red flag symptoms.

In conclusion, CES is rare (<0.5% of ED presentations). There was an age peak between 25 and 65 years, with a spike after the age of 75 years. It has a large female preponderance in keeping with the observation from other studies. Ninety five per cent of cases in our cohort met the NICE red flag criteria. Most cases were managed locally and conservatively.

Keywords: *cauda equine; emergency; retrospective study; red flags; NICE*

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