P31

Cauda equina syndrome – the importance of an early, accurate diagnosis and treatment in preventing bladder dysfunction

Victoria Amy PorterMiss
Lancaster University

Corresponding Author: Miss Victoria Porter
(victoriaporter00@googlemail.com)

Introduction: Cauda Equina Syndrome (CES), is a neurological emergency with many urological features. Delayed decompressive surgery can cause urinary retention, overflow incontinence, long term catheterization and loss of sexual function. This article focuses on the accuracy of the initial diagnosis and the time taken before treatment is commenced.

Methods: In this systematic literature review, OneSearch and PubMed have been searched for articles which identify the main symptoms of CES, evaluate the effectiveness of several diagnostic methods and compare the postoperative results of bladder function following timely and delayed treatment.

Results: A total of 20 articles have been referenced, of which 9 studies have been reviewed. While no individual symptom is 100% indicative of CES, urinary retention (diagnostic accuracy 0.9), is the most consistent clinical finding. Therefore, MRI is necessary for an accurate diagnosis. Further 4 out of 5 studies state that treatment within 24-hours improves patient outcomes compared to 48-hours, one study showed no significant difference between 24 and 48-hours. All articles indicate beyond 48-hours, surgical intervention has little impact on the relief of symptoms.

Conclusion: The studies concluded that any patient presenting in the emergency department with lower back pain should be screened for CES. A thorough history and neurological examination should be performed; however, the evidence base for rectal examination to assess anal tone is poor. Decompressive surgery carried out within the first 24-hour period from the onset of symptoms is favourable. Overall, early accurate diagnosis and treatment is invaluable to preventing urological complications and improving prognosis.