

Cauda Equina Syndrome

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Cauda equina is a nerve roots collection which is formed by caudal tapering and ending of the spinal cord at the approximate L1 level in most of the adult cases and looks like the tail of a horse in its shape. Cauda equina's compression may result in some neurological deficits which can last permanently, so it would be an emergency condition. The nerve roots of the cauda equina have myelin sheaths which are thin in nature and because of having such property, cauda equina is vulnerable to injuries. Malignant, traumatic and degenerative causes are the common ones of the syndrome related to the cauda equina. Paragangliomas, myxopapillary ependymomas and schwannomas are the most common neoplasms which can cause cauda equina syndrome. Degenerative disease of the lumbar disc can also cause cauda equine syndrome. Saddle anesthesia, absent reflexes in the lower extremity, low back pain, sensory and motor deficits in lower extremities, radiculopathy which is most common unilaterally and retention or incontinence in the bladder or the bowel, are the cauda equina related symptoms. Lower back pain in combination with alteration in urinary functions, should make the clinician to be suspicious about the presence of cauda equina syndrome in the relevant patient and therefore lumbosacral MRI study should be done for diagnosis. Emergency decompression surgery should be done in not more than two days from the onset of appearance of cauda equine syndrome. In case the surgery can be done until six hours after the onset of the appearance of the cauda equine syndrome, it would be much more

better. Laminectomy, neural decompression, fusion in unstable cases and resection of the possible tumor in the setting of the presence of a neoplasm, should be done during surgery to treat cauda equina syndrome.

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