

Images in clinical medicine



Brown-Séquard's syndrome (spinal hemiplegia) and calcified cervical disc herniation

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Received: 19 Jun 2020 - **Accepted:** 03 Jul 2020 - **Published:** 09 Jul 2020

Keywords: Brown Séquard's Syndrome, cervical disc herniation, cervical spine, neurosurgery, spinal cord compression, spinal hemiplegia, surgical decompression

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Cite this article: Ali Akhaddar et al. Brown Séquard's syndrome (spinal hemiplegia) and calcified cervical disc herniation. PAMJ Clinical Medicine. 2020;3(97). 10.11604/pamj-cm.2020.3.97.24417

Available online at: <https://www.clinical-medicine.panafrican-med-journal.com//content/article/3/97/full>

Brown Séquard's syndrome (spinal hemiplegia) and calcified cervical disc herniation

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Image in medicine

Brown-Séquard's syndrome (BSS) is an unusual clinical entity caused by damage to one half of the spinal cord mimicking a classic hemiplegia. This syndrome is characterized by ipsilateral loss of motor function (paralysis), proprioception, and vibratory sensation, combined with contralateral loss of pain and temperature sensation. Spinal cord injuries and tumoral diseases were the most frequent etiologies associated with BSS. Spontaneous cervical disc herniation has rarely been considered. This 49-year-old man, previously healthy, presented with a two-year history of progressive left arm and leg paresis associated with decreased pain and thermal sensitivity in the right hemibody below the C5 dermatoma without bladder or bowel complaints. There were bilateral extensor plantar responses. Brain computed tomography (CT) scan performed at another

institution was normal. Spinal cervical magnetic resonance imaging and CT-scan showed a voluminous calcified cervical disc herniation at C4-C5 vertebral level (arrows) with marked compression of the left half of spinal cord. A complete surgical spinal cord decompression was performed by an anterior cervical approach with interbody fusion. There was a partial recovery of neurological status after a long time of physical rehabilitation. In some incomplete forms of BSS, hemiplegia or hemiparesis may be confused with those caused by brain damage as seen in our patient. Accordingly, the diagnosis is further delayed. Spinal MRI should be employed early in the diagnostic evaluation of such patients. In addition, cervical disc herniation should be considered in the differential diagnosis of BSS, even in the absence of the typical symptoms.

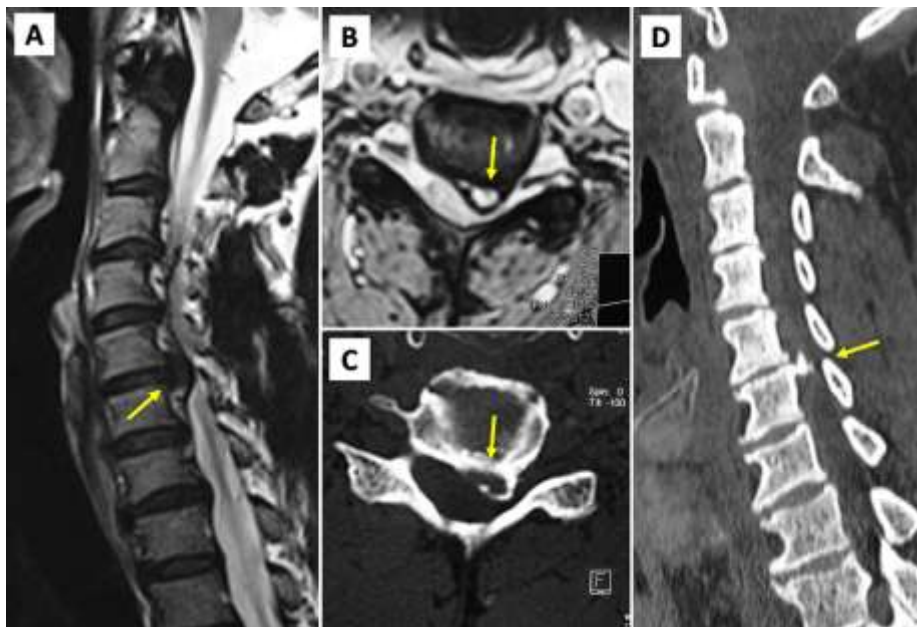


Figure 1: Brown-Séquard's syndrome (spinal hemiplegia) and calcified cervical disc herniation