

In response to: Collet-Sicard Syndrome After Jefferson Fracture

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We read with great interest the recent article by Shahrivini et al concerning Collect-Sicard syndrome after Jefferson fracture.¹ The authors present a detailed report of the syndrome in an aged woman after an accidental forward fall with head injury. This case is unique, as we found no geriatric patients with associated Jefferson fracture in our previous review of Collect-Sicard syndrome.² In that report, the mean age of the 5 reported cases in the literature was 40 (range 18-58) years.

The case reported by Shahrivini et al was caused by a 4-part fracture of the atlas, which the authors classify as a Jefferson fracture. According to the classification by Landells and Van Peteghem, this is a type II fracture.³ They cite 4 other cases of 2- or 3-part atlas fracture. Before Jefferson, Quercioli was the first to describe a 4-part fracture of the atlas and neurological symptoms.⁴ The authors exhibit very interesting CT signs of vocal cord paralysis and hypoglossal nerve injury, which have strong diagnostic evidence of neural damage. In these cases of Collect-Sicard syndrome, the classification of the type of atlas fracture is much less relevant than the degree of displacement of one of its joint masses with consequent compression of the bundle of the last 4 cranial nerves against the styloid process. It is essential to highlight the displacement of the lateral masses of the atlas and to document the reduction of the space between them and the styloid processes. The patient reported by Shahrivini et al remained dependent on gastrostomy tube feeding, whereas younger patients in our review had complete (3/5) or partial (2/5) recovery. Because accidental or secondary falls are frequent in the elderly population, the possibility of Collect-Sicard syndrome must always be suspected, even if the patient manifests only partial symptoms in phonation and swallowing, to avoid bronchopneumonia infectious events.


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