



Traumatic occipitoatlantal dissociation: high index of suspicion should be kept in mind

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A 51-year-old man was admitted after cardiopulmonary resuscitation following trauma due to a road traffic accident. He was mechanically ventilated with in-line cervical spine stabilization, had a Glasgow Coma Scale score of 3 and absent pupillary reflex.

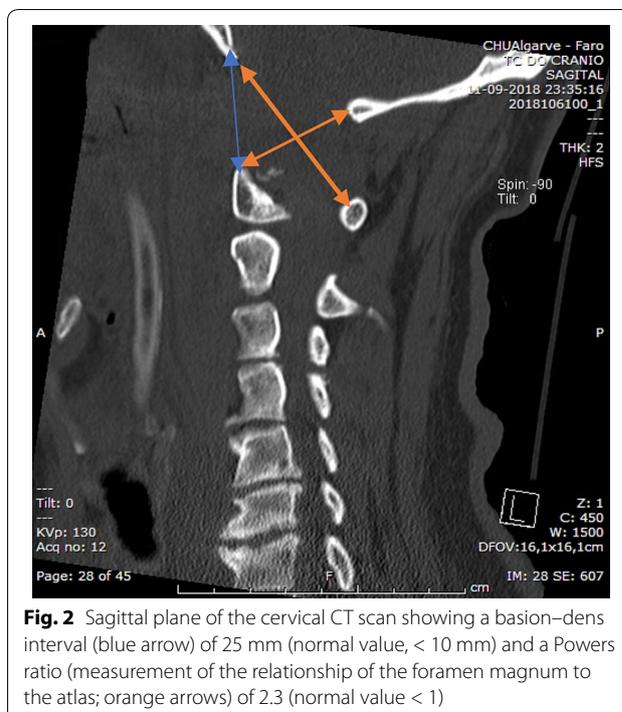
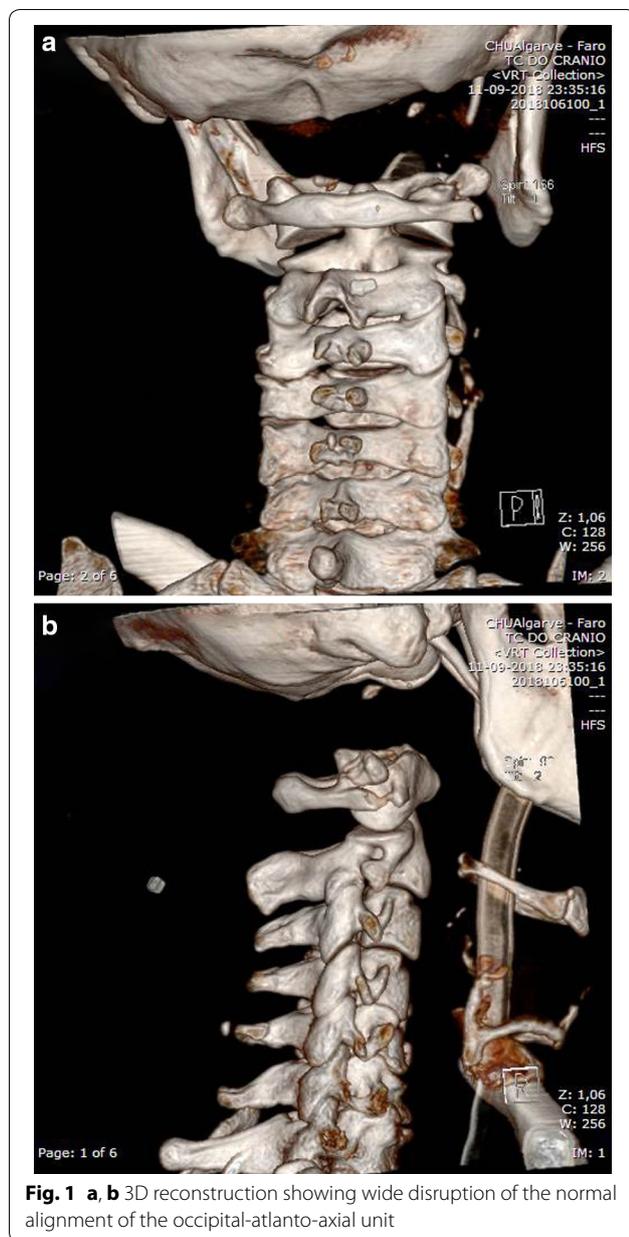
The cervical CT was remarkable for occipitoatlantal (OA) dissociation, grade 2 on Horn classification, with complete disruption of the osseo-ligamentous complex of the OA joint (Fig. 1a, b), a basion–dens interval of 25 mm, and Powers ratio of 2.3 (Fig. 2).

Severe OA dissociation is rare and usually has a devastating outcome. The literature describes an annual incidence of OA dissociation at the emergency department of 0.6% [1]. A high index of suspicion is required for timely diagnosis, keeping in mind the wide range of neurological deficits depending on brain stem, spinal cord, and vascular injuries, and that the patient evaluation can be overshadowed by simultaneous polytrauma.

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Compliance with ethical standards

Conflicts of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Reference

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