ORIGINAL ARTICLE



Regional and experiential differences in surgeon preference for the treatment of cervical facet injuries: a case study survey with the AO Spine Cervical Classification Validation Group

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Received: 17 June 2020 / Revised: 2 July 2020 / Accepted: 9 July 2020 © The Author(s) 2020

Abstract

Purpose The management of cervical facet dislocation injuries remains controversial. The main purpose of this investigation was to identify whether a surgeon's geographic location or years in practice influences their preferred management of traumatic cervical facet dislocation injuries.

Methods A survey was sent to 272 AO Spine members across all geographic regions and with a variety of practice experience. The survey included clinical case scenarios of cervical facet dislocation injuries and asked responders to select preferences among various diagnostic and management options.

Results A total of 189 complete responses were received. Over 50% of responding surgeons in each region elected to initiate management of cervical facet dislocation injuries with an MRI, with 6 case exceptions. Overall, there was considerable agreement between American and European responders regarding management of these injuries, with only 3 cases exhibiting a significant difference. Additionally, results also exhibited considerable management agreement between those with \leq 10 and > 10 years of practice experience, with only 2 case exceptions noted.

Conclusion More than half of responders, regardless of geographical location or practice experience, identified MRI as a screening imaging modality when managing cervical facet dislocation injuries, regardless of the status of the spinal cord and prior to any additional intervention. Additionally, a majority of surgeons would elect an anterior approach for the surgical management of these injuries. The study found overall agreement in management preferences of cervical facet dislocation injuries around the globe.

Keywords Cervical spine · Trauma · Spinal injuries · Joint dislocations · Neck injuries · Spinal diseases

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s00586-020-06535-z) contains supplementary material, which is available to authorized users.

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Published online: 22 July 2020

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