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Conservative Management of Odontoid Fractures in Octogenarians: Beyond Radiological Union

Keywords
odontoid fracture, cervical spine fracture, octogenarians, conservative management, frailty, cervical collar immobilisation

Dear Editor,

We read with great interest the study by Speldova et al examining the outcomes of conservative treatment of type II odontoid fractures in patients aged over 80 years.[1] The authors address an increasingly important clinical challenge as cervical spine fragility fractures rise alongside population ageing. Their findings demonstrate meaningful improvement in pain and disability despite relatively modest rates of bony union. This reinforces an emerging principle in geriatric fracture care that radiological union may be less important than clinical stability and preservation of function in older patients.[2,3] Indeed, stable fibrous union without neurological compromise has increasingly been recognised as an acceptable outcome in carefully selected elderly patients when operative risk is substantial. However, caution is warranted when interpreting these findings in isolation.

The majority of patients in this cohort were contraindicated for surgery because of significant comorbidity (ASA IV–V), meaning conservative management largely represented clinical necessity rather than an alternative treatment strategy. In this context, outcomes may primarily reflect patient selection and baseline frailty rather than direct equivalence between operative and non-operative approaches. The reported mortality rates of 21.2% at 30 days and nearly 40% at one year are comparable to outcomes observed in other frailty-associated fractures and likely reflect the underlying vulnerability of this population rather than the treatment modality itself.

Another important consideration relates to the process of conservative management. Cervical collar immobilisation, although widely used, is associated with recognised complications including dysphagia, impaired swallowing mechanics and pressure-related skin injury, particularly among frail older adults with reduced physiological reserve.[4,5] These factors may influence both patient experience and recovery trajectories during treatment. While Speldova et al appropriately focused on radiological healing and functional recovery, incorporating patient-centred outcomes relating to comfort and tolerance of immobilisation may provide additional insight into the real-world implications of collar-based management.[6] Furthermore, age-related anatomical changes in the cervical spine including increased lordosis and altered alignment, may influence whether standard collars reliably maintain a neutral cervical position in older adults.[7] Understanding whether current immobilisation devices adequately account for these anatomical differences could have implications for future collar design and personalised approaches to treatment.

Finally, the protocol described by the authors emphasises early mobilisation, which aligns with broader geriatric fracture principles and may represent a key determinant of recovery independent of fracture union. Taken together, the study by Speldova et al provides valuable evidence supporting pragmatic conservative management in carefully selected octogenarians with odontoid fractures while highlighting opportunities to further refine treatment pathways through greater attention to frailty, patient-centred outcomes and optimisation of immobilisation strategies.

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