

SIMPLE SOLUTION FOR A COMPLEX FRACTURE

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Introduction: Traumatic cervical spine injuries are common and Odontoid fractures are reported to account for up to 15% of all the spine injuries.¹ The severe form of injury is associated with dislocation of the atlanto-axial joint. This type of injury mostly involves the elderly and sometimes can be fatal. Management of this fracture remains controversial due to many compounding factors such as osteoporotic bones and extreme age which may complicate surgery. Here we report a case of a type 3 complex, high-energy subtype of odontoid fracture which was treated conservatively with gradual traction and followed by halo vest.

Discussion: A 67 year old gentleman fell from 10 feet height. His neck hit the tree branches while falling. Post fall, he was still able to ambulate but had complains of pain at the back of the neck and stiffness. Clinically he his chin appeared to be deviated to the right, left turning of the head was limited and painful, otherwise there was no neurological deficits. CT cervical showed fracture at the base of odontoid extending towards the lateral mass bilaterally associated with right lateral atlanto-axial subluxation and fracture of left transverse process of C2,. There was also subluxation of C2/C3 facet joints with small intraspinal bony fragment adjacent to left side of dens. He was started on halo ring traction for 14 days with gradual increase of the weight (up till 2kg). It was converted to halo vest after 2 weeks of traction. Patient was subsequently followed up with serial plain radiographs as an outpatient. The halo vest was kept for 3 months .Fracture was united after 3 months

Conclusion: Non surgical treatment is still a viable option for the complex subtype odontoid fracture. We managed to correct the alignment of the neck via gradual traction and it showed a satisfactory outcome.