

Odontoid fractures

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There are three types of odontoid peg fracture (Figure 30.27). Neurological injury is rare. The majority of acute injuries are treated non-operatively in a hard collar or halo jacket for 3 /uni00A0 months. Internal fixation with an anterior compression screw is indicated for displaced fractures (Figure 30.28), and a posterior C1/2 fusion is considered in cases of non-union. In the elderly , treatment in a soft collar should be considered on the basis that a relatively stable pseudarthrosis will occur. Traumatic spondylolisthesis of the axis (hangman's fracture) This is a traumatic spondylolisthesis of C2 on C3. There are four types with varying degrees of instability (Figure 30.29). Those with significant displacement or associated facet disloca - tion are treated operatively , usually with posterior stabilisation.

(b) Figure 30.26 (a) Atlantoaxial subluxation. (b) C1/2 posterior fusion using C1 lateral mass and C2 pedicle screws. Type I Type II Type III Figure 30.27 Types of odontoid fracture. (b) Figure 30.28 (a) Type II odontoid fracture (arrow); (b) treated with an anterior compression screw.

(b) Figure 30.29 (a) Hangman's fractures of C2 with minimal forward translation (arrow). (b) C2/3 subluxation with spinal cord contusion.

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