

Fractures of C2 dens: our casistic and state of the art.

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Odontoid fractures are the most common cervical spine fractures in the elderly (> 65 years).

As the population ages, their incidence is expected to increase progressively.

The type of fracture is assessed according to the classification of Anderson – D'Alonso.

The best treatment of these cases is still a controversy. In the literature there is not an agreement about this object.

The choice is between surgical and conservative therapy. It's very important to evaluate some parameters before the decision: age, general conditions, osteoporosis, type of fracture, dislocation, associated lesions, etc:

A pre-operative study is a first step that allows us to take the right decision for the patient.

X-ray, CT-scan (for bone tissue), MRI (for ligaments and spinal cord lesions) are mandatory.

In case of conservative treatment, the use of an orthosis to be maintained for at least a three months period is common.

In our department of Neurosurgery, we have treated 72 cases in the last 12 years: 51 conservatively and 21 surgically (2 of 21 were treated conservatively at the beginning).

The surgical treatment consists of 15 anterior screw fixations of the dens, 2 posterior occipito-cervical fixations, 4 posterior cervical fixations.

In the conservative treatment we have used Philadelphia or SOMI-brace.

The cases over 65 y.o. were 60 (12 surgical anterior, 2 surgical posterior, 46 conservative).

The anterior screw fixation was reserved at type 2 Anderson-D'Alonso. The posterior way for type 2 or 3.

According with the international data, we report the analysis of our cases.