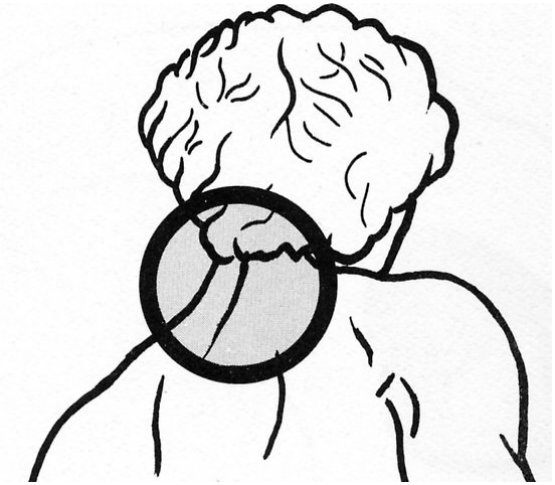
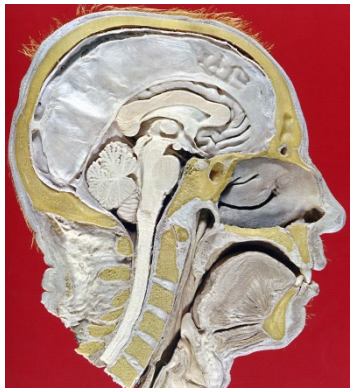
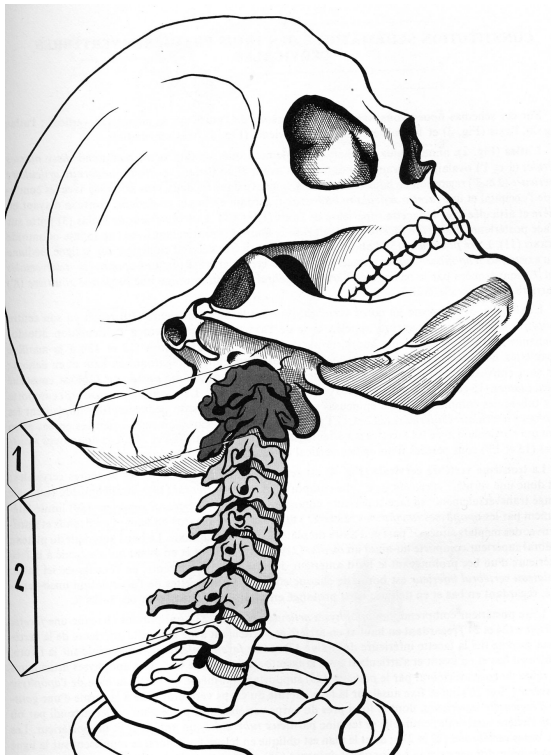
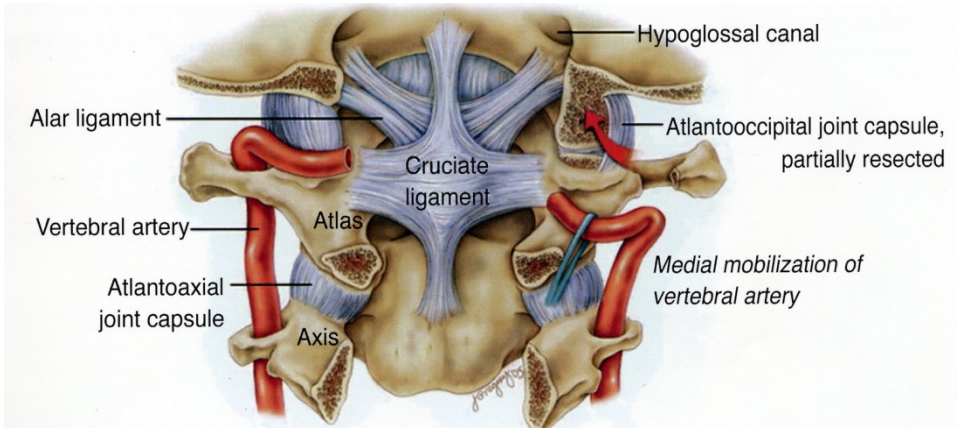
Lésions traumatiques du rachis cervical supérieur



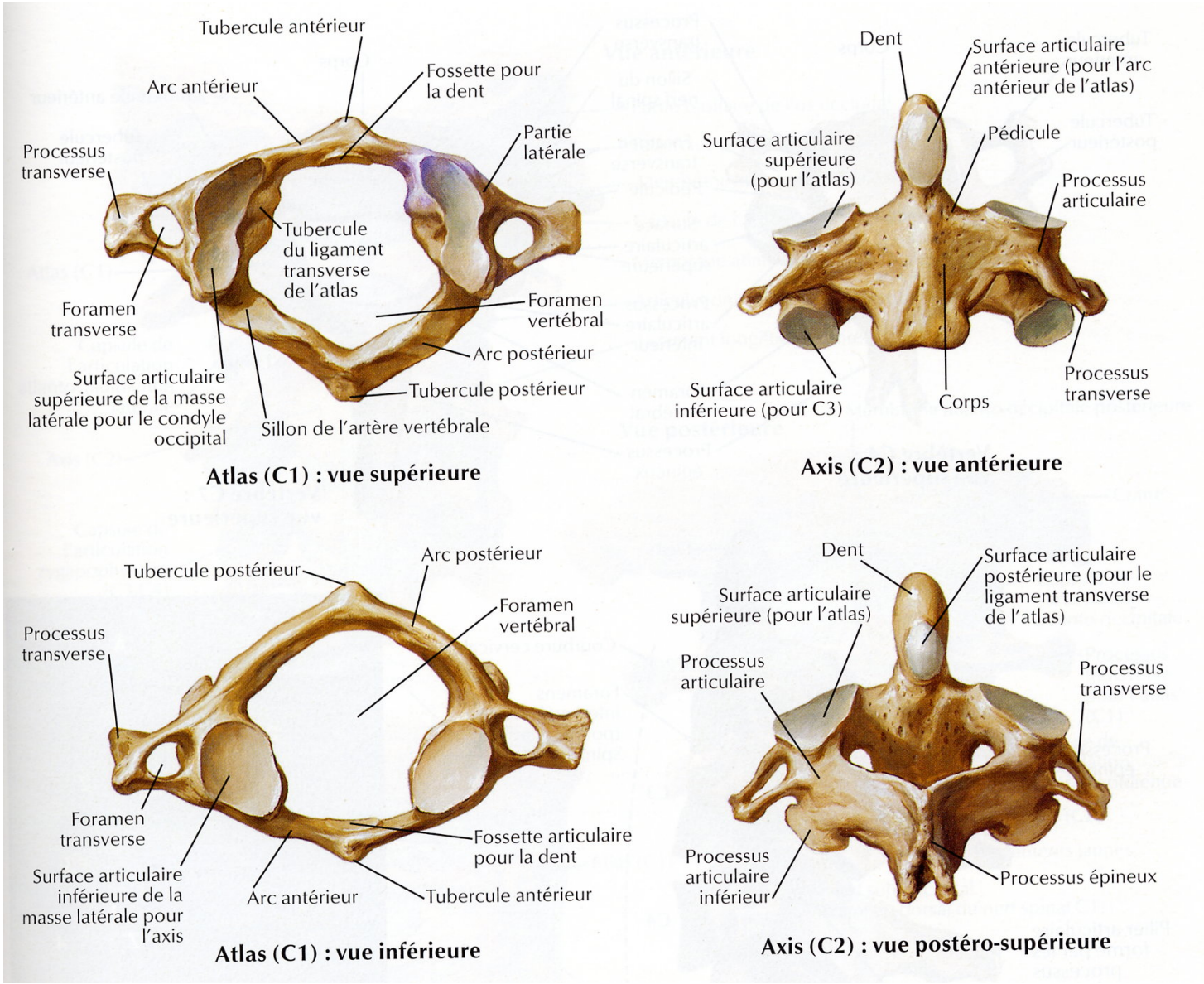
Pr Xavier MORANDI – CHU Rennes



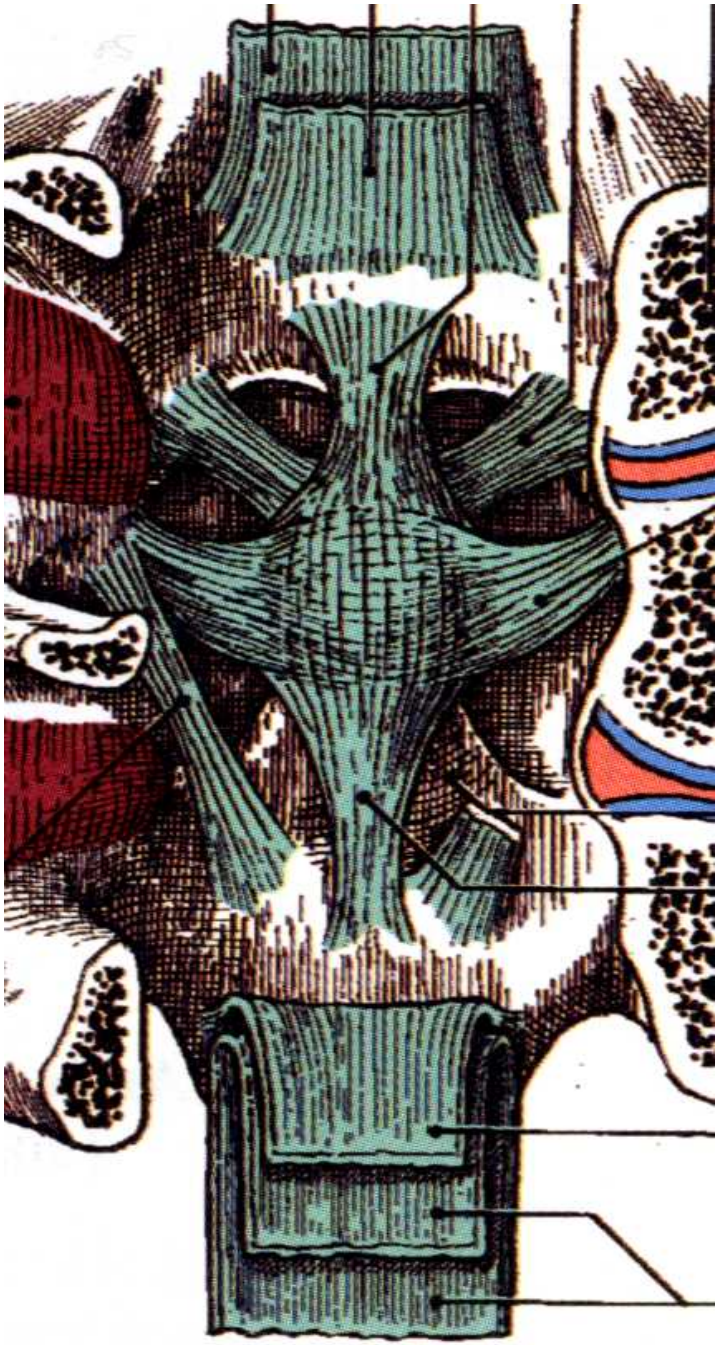




Rachis cervical supérieur: C1(atlas) et C2 (axis)



Ligament alaire



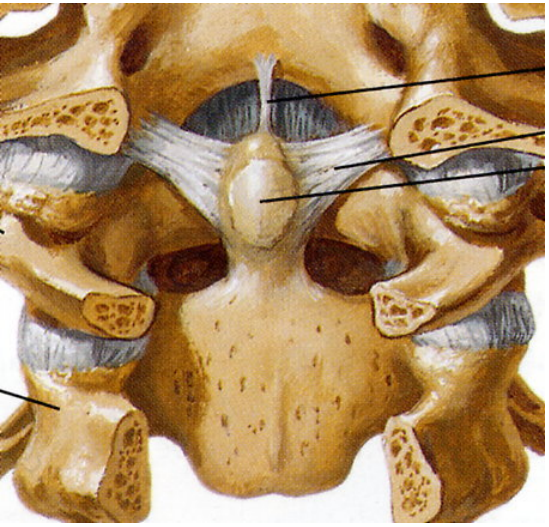
Ligament cruciforme: ligt transverse et faisceau longitudinal

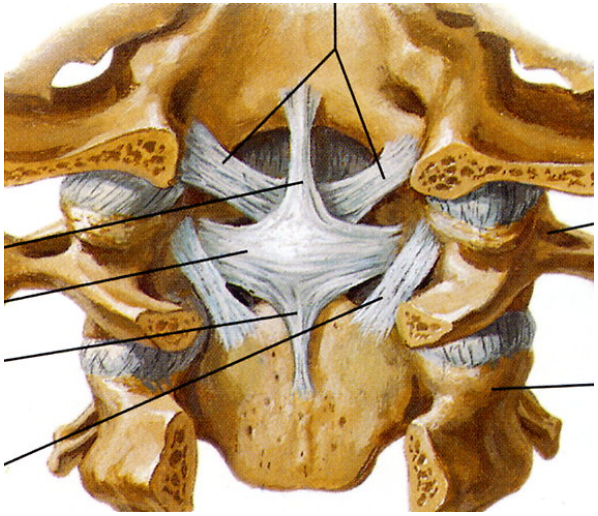
Ligament atlanto-axoïdien accessoire

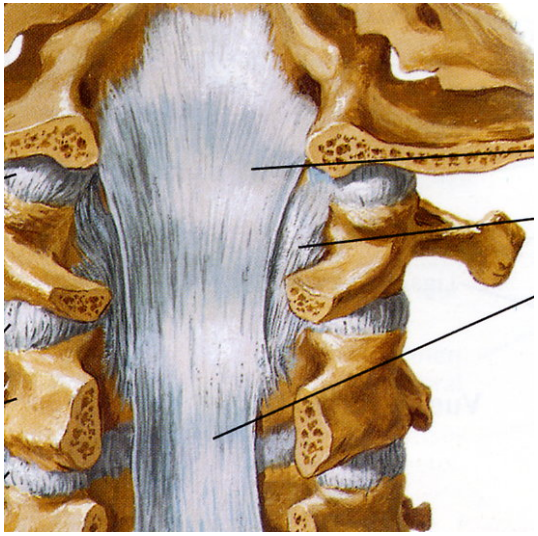
Membrana tectoria

Ligament longitudinal postérieur

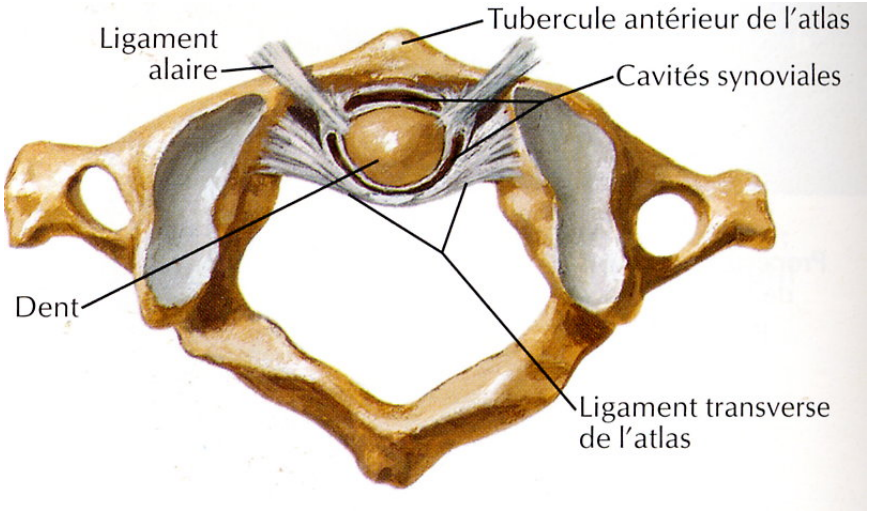
Rachis cervical supérieur

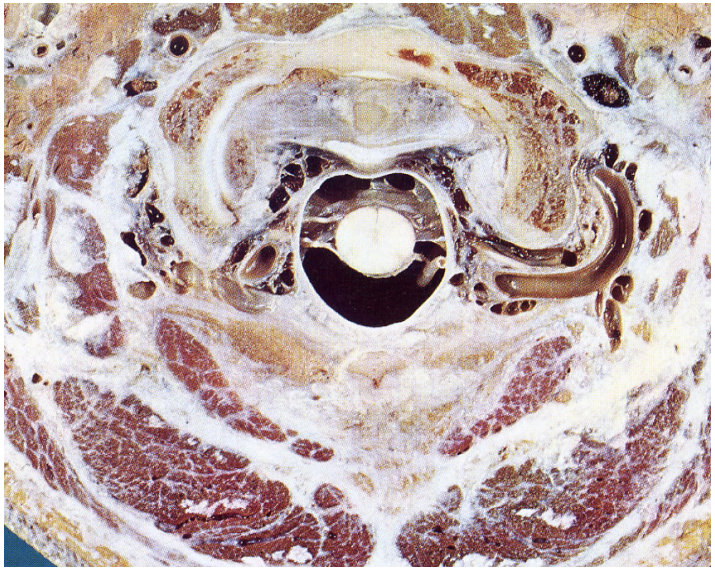


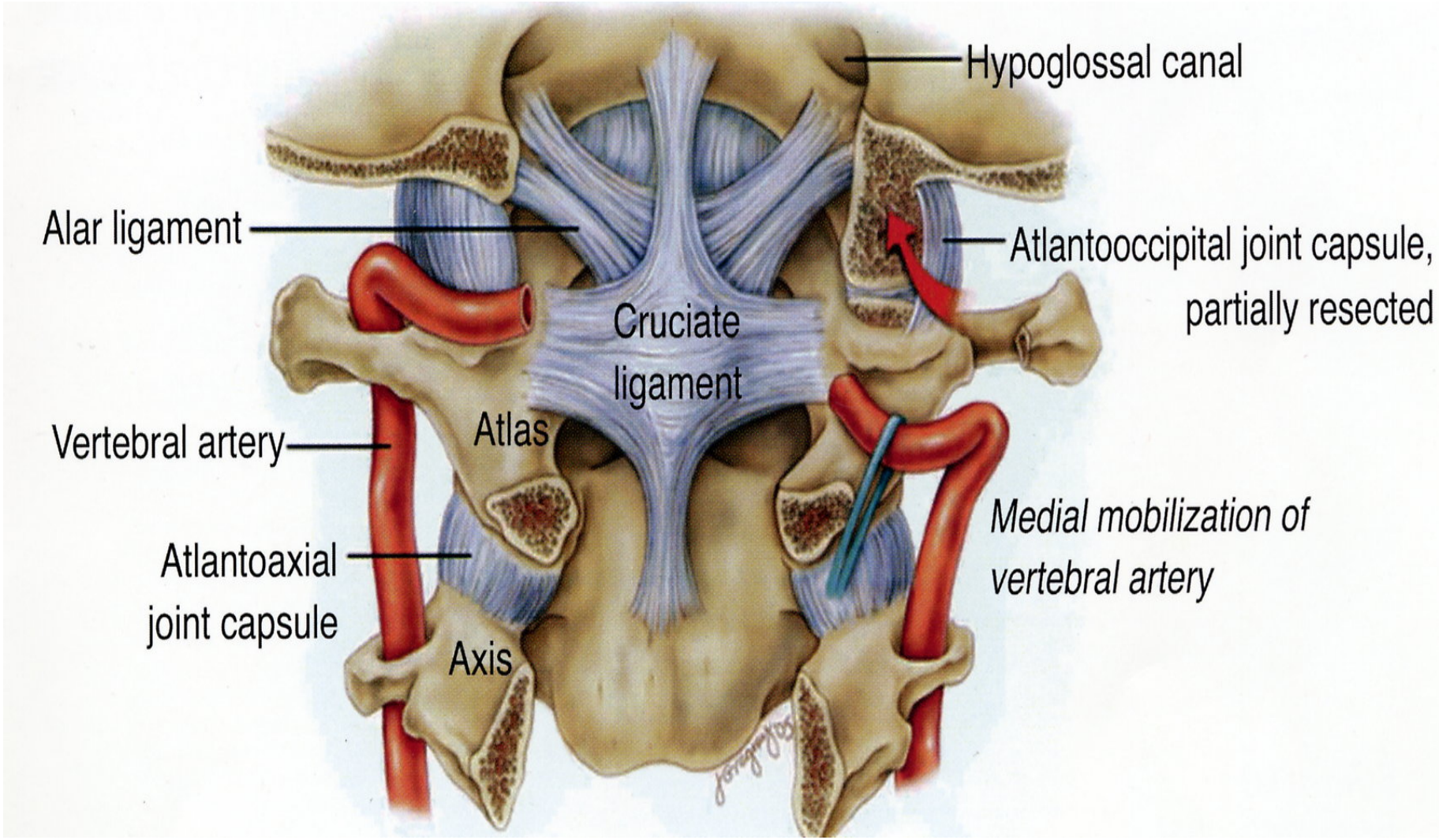




Appareil ligamentaire complexe







Rapports vasculaires: V2 et V3

Anatomie fonctionnelle

Préserver les fonctions !

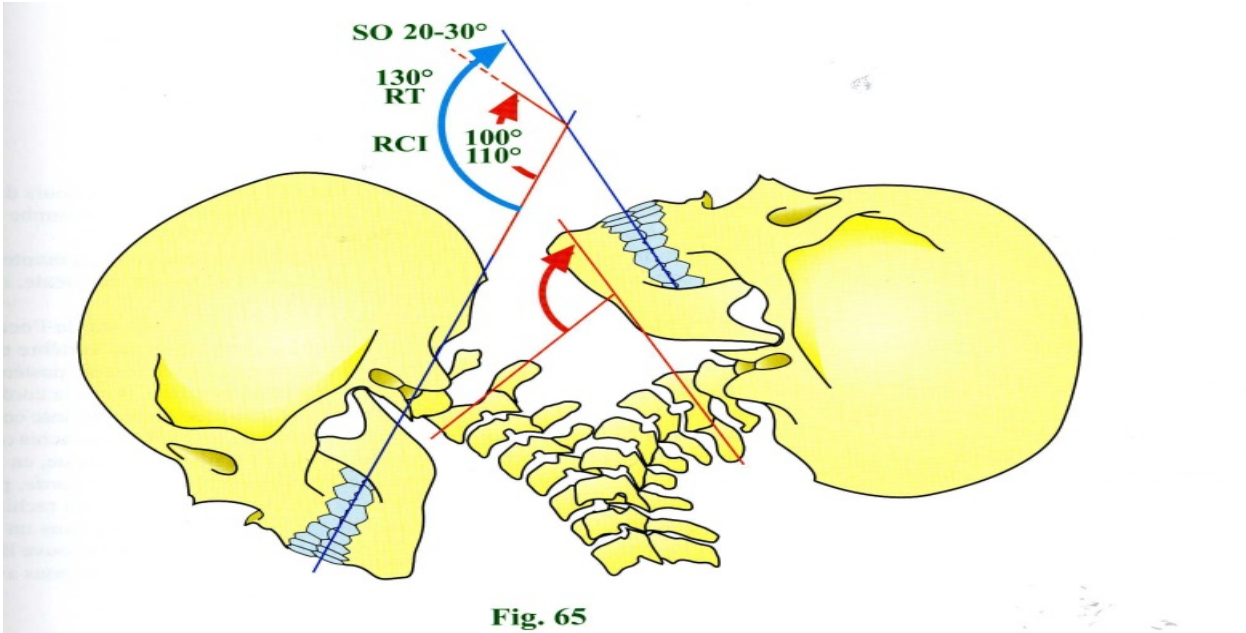
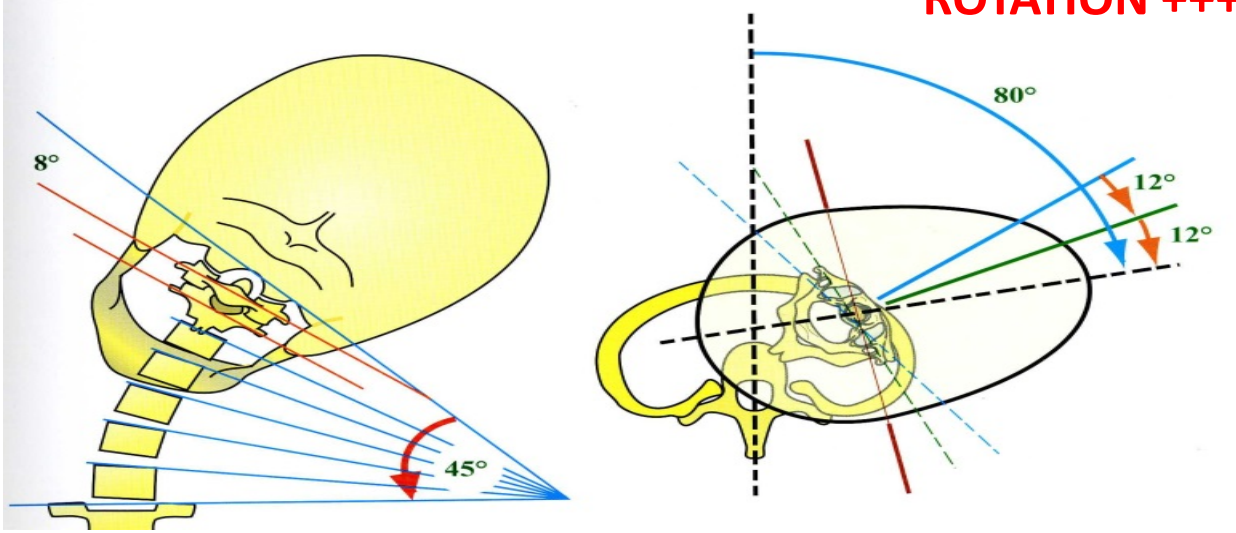
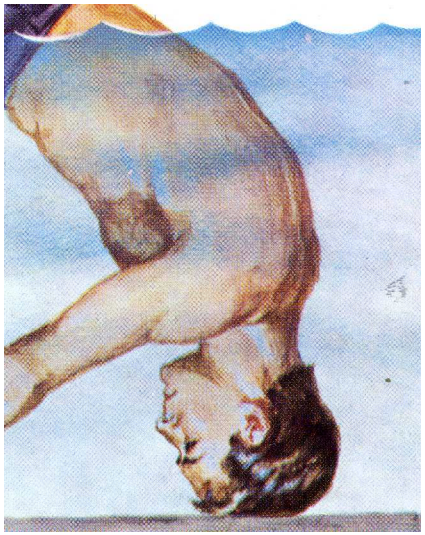


Fig. 65

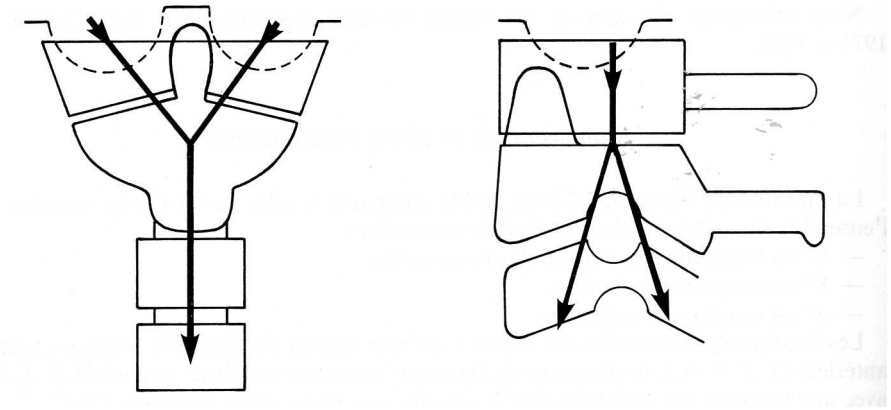
ROTATION +++



Mécanismes lésionnels: isolés ou associés



Compression



Flexion

Extension

Principes généraux du traitement

- **Réduire si déplacement**

- **Immobilisation / Fixation**
- **- conservateur: minerve (2- 4 mois). Surveillance ++ observance, tolérance et consolidation. Rééducation isométrique.**

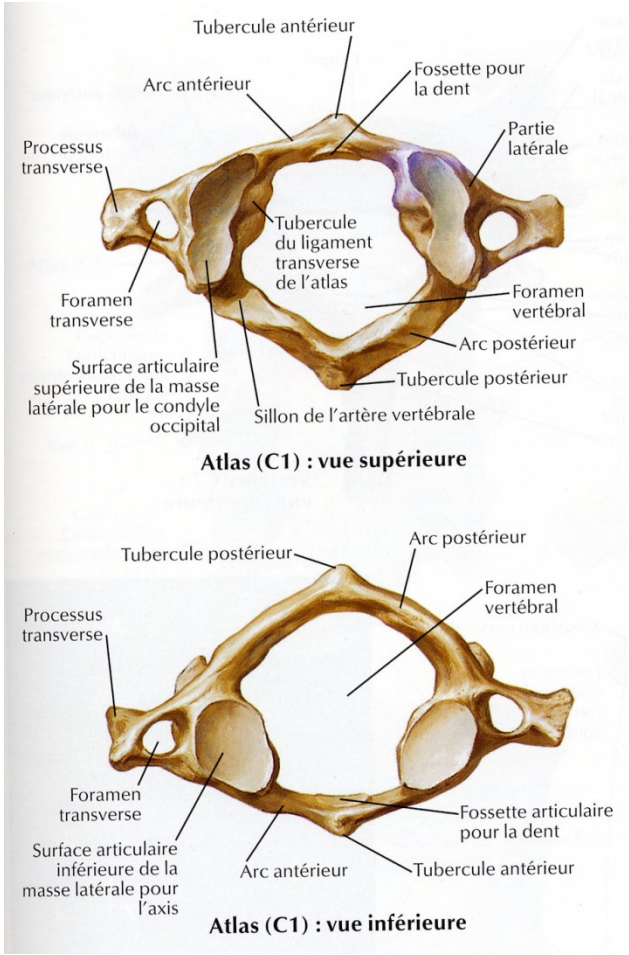
- **- chirurgical: décompression et fixation: arthrodèse/ostéosynthèse**

- **Préserver les fonctions (rotation++) autant que possible**

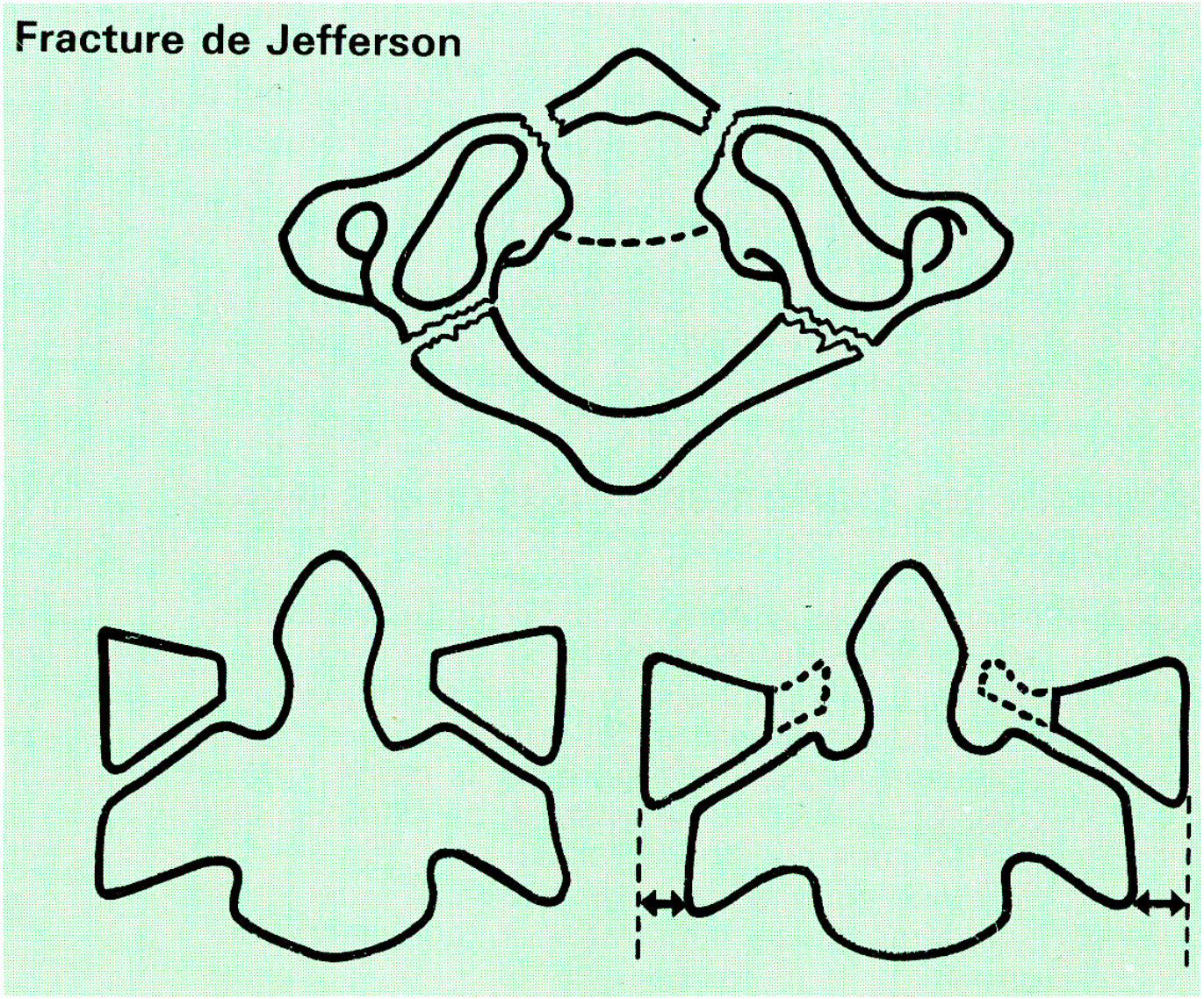
Fractures de l'atlas

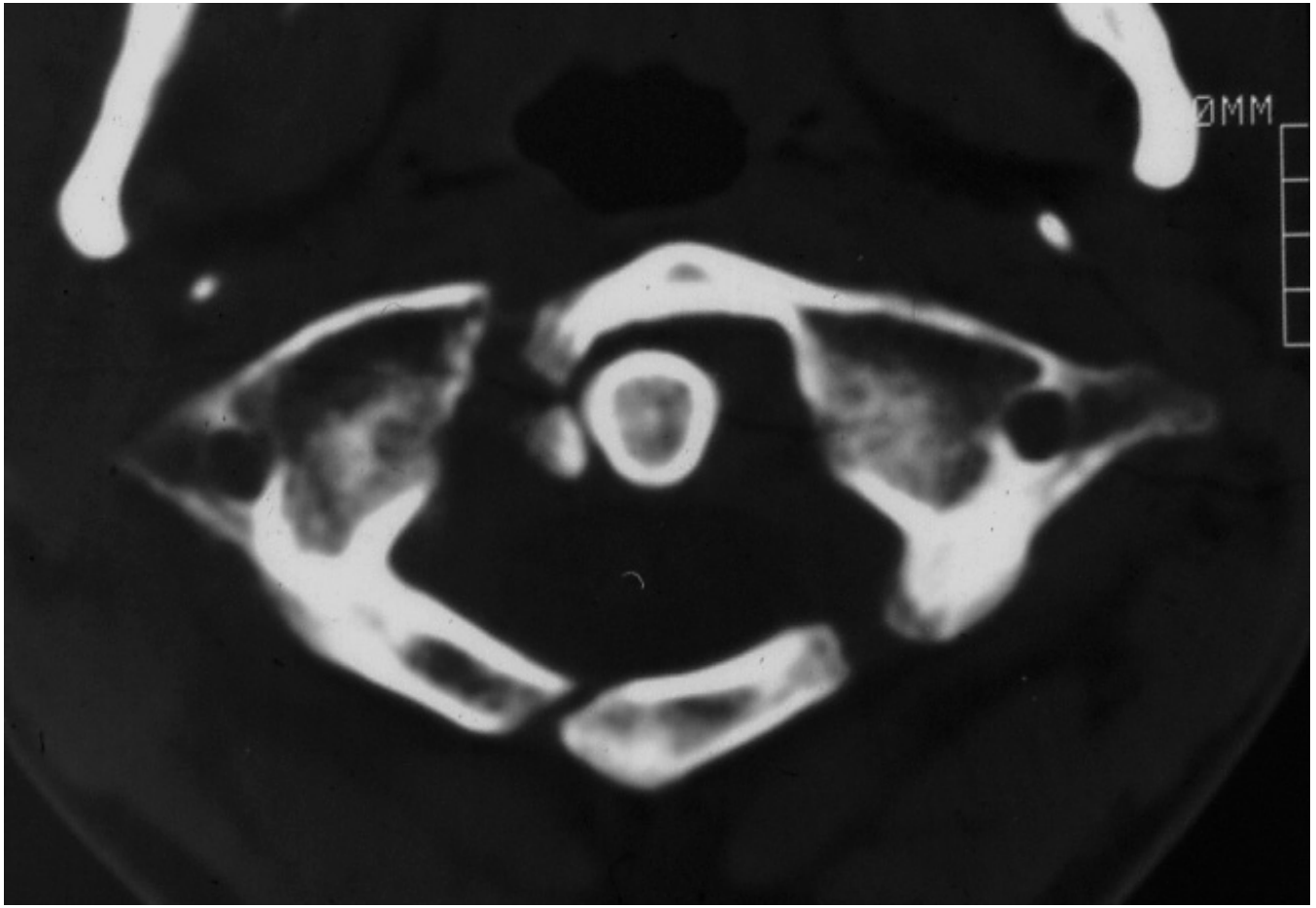
- **Fracture isolée de l'arc postérieur**
- **Fracture isolée de l'arc antérieur**
- **Fracture transglénoïdienne**
- **Fracture-luxation divergente des masses latérales**

  = Fracture de Jefferson



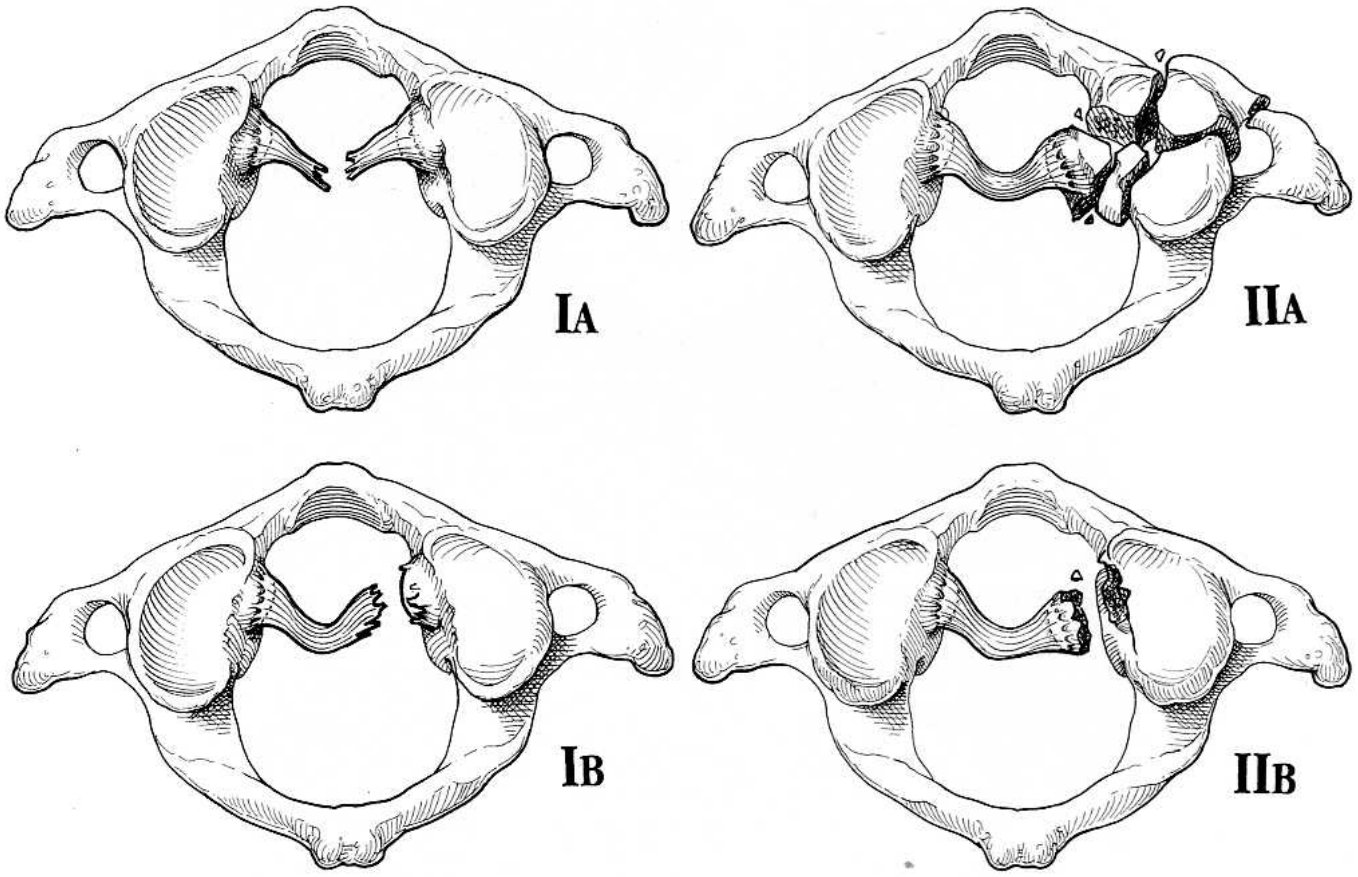
Fracture de Jefferson



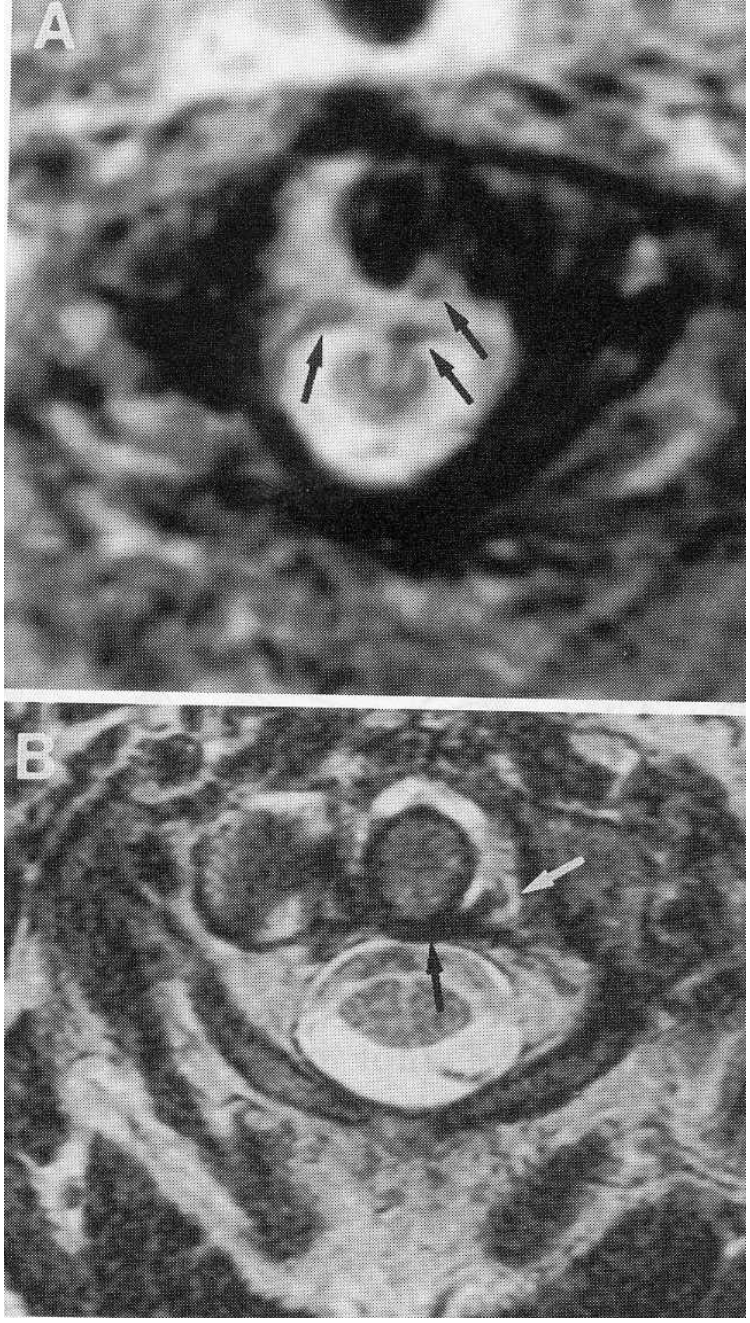


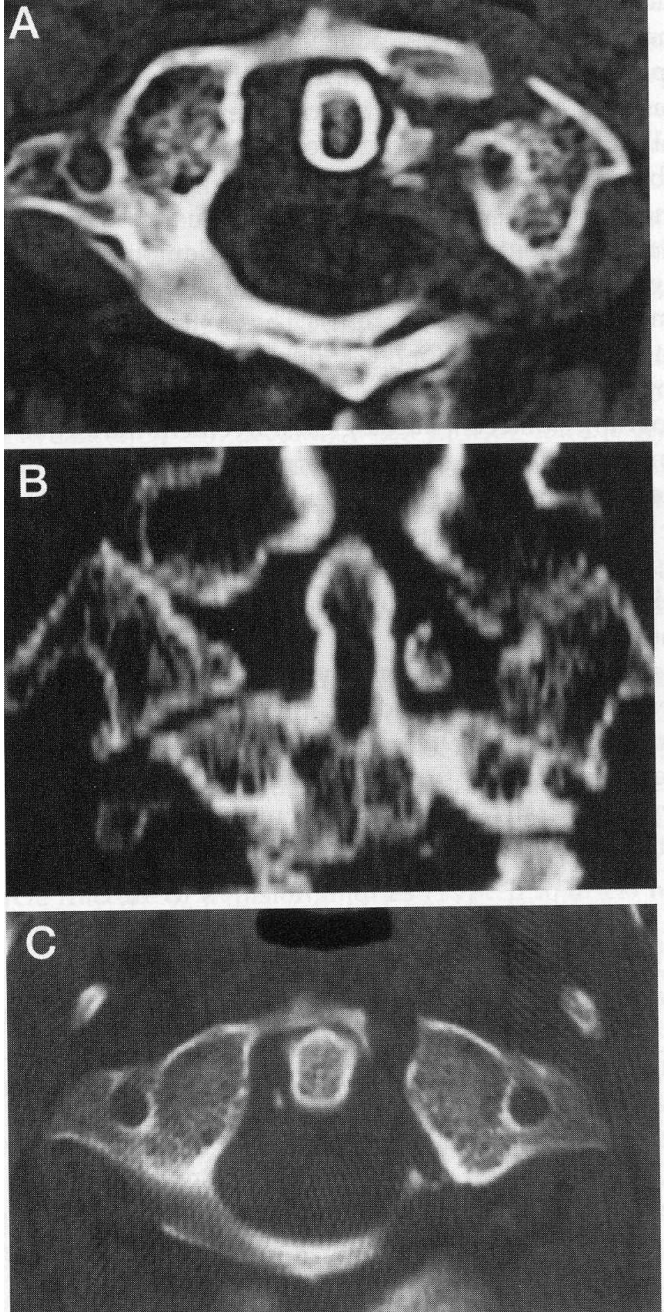
Traitement conservateur ++++ ou arthrodèse O-C

Lésions du ligament transverse de l'atlas

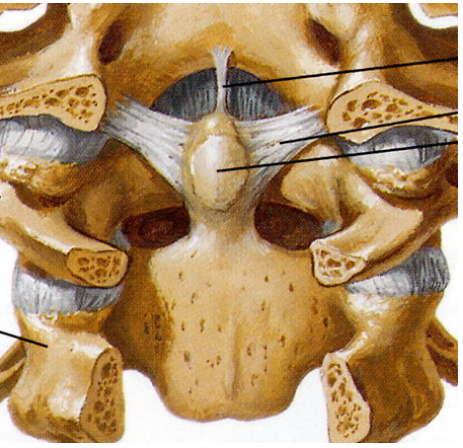


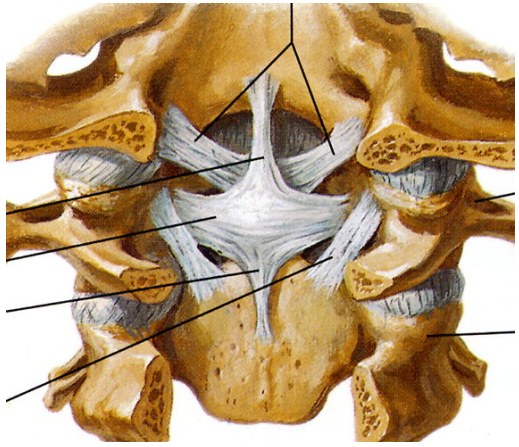
Classification de Dickman (1996)

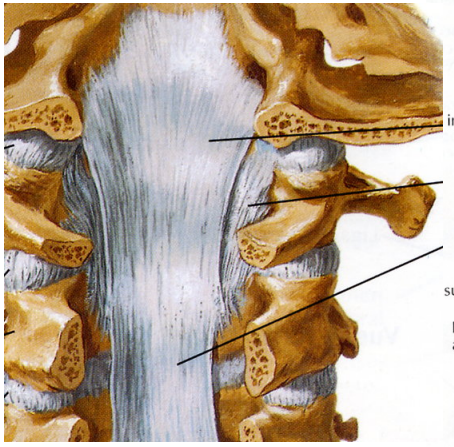

A
B

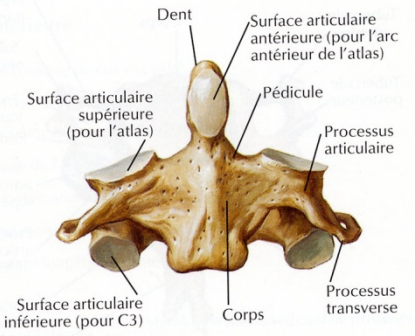

A
B
C

Fracture de la dent de l'axis

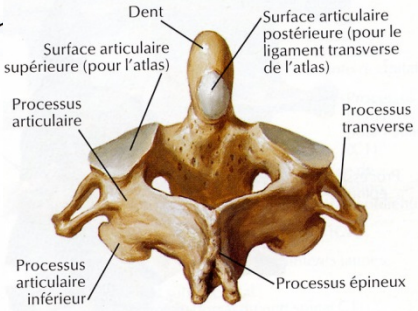






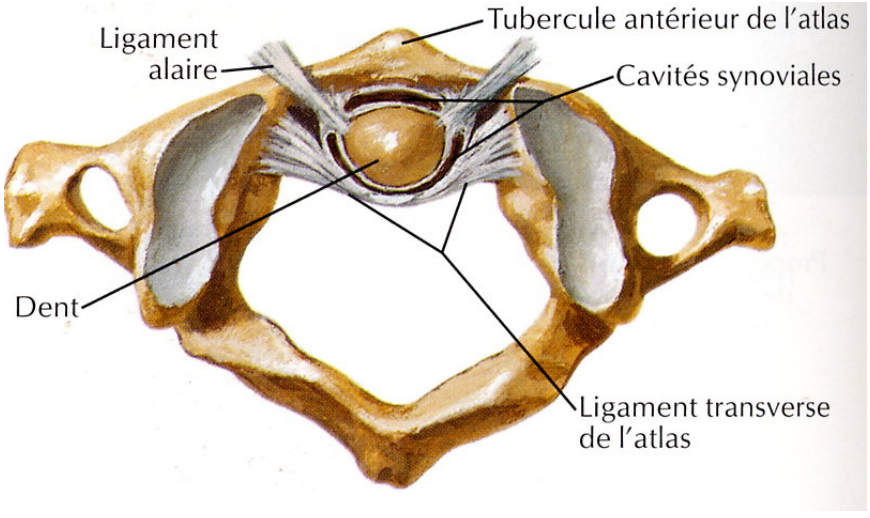


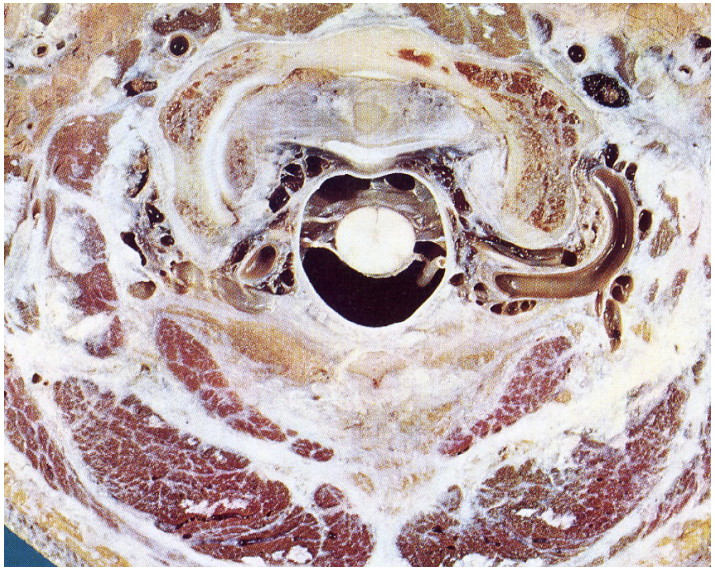
Axis (C2) : vue antérieure



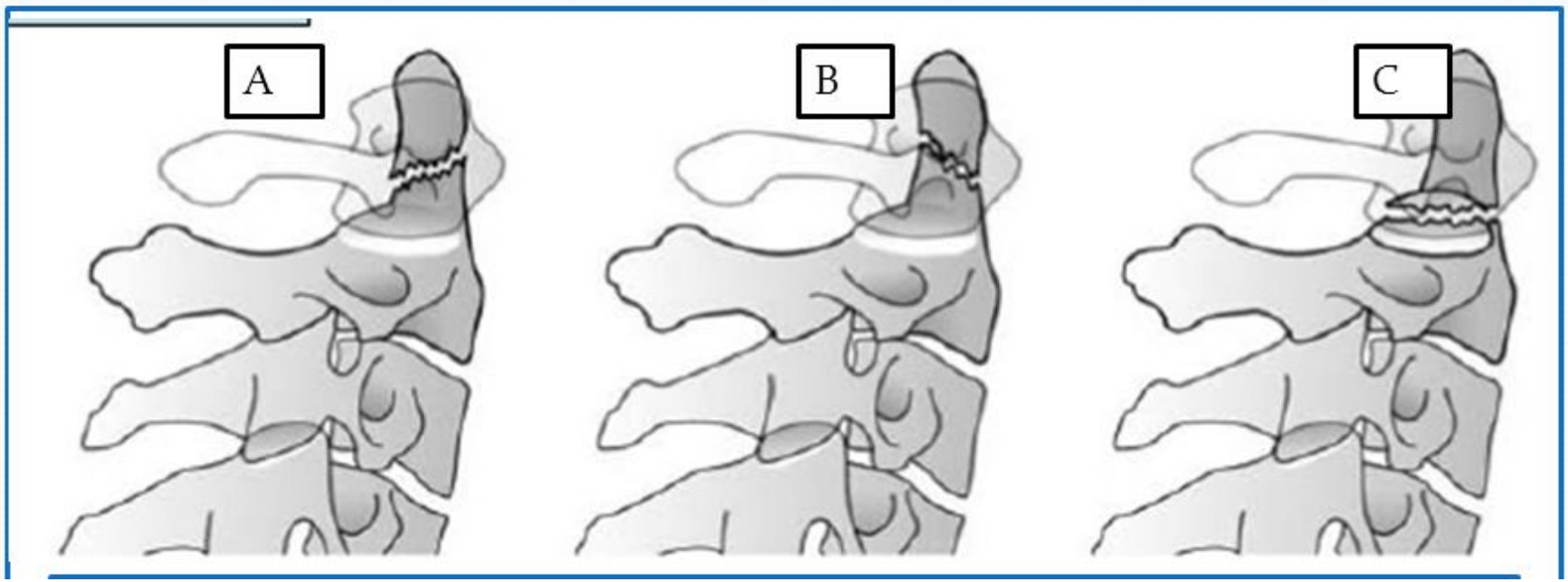
Axis (C2) : vue postéro-supérieure

ROTATION



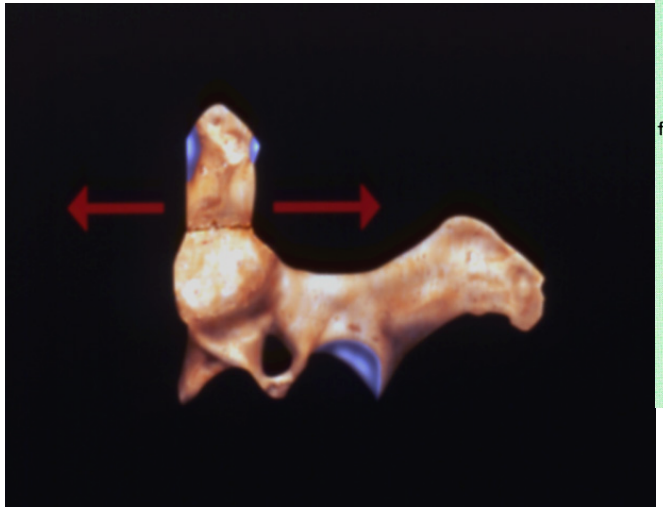


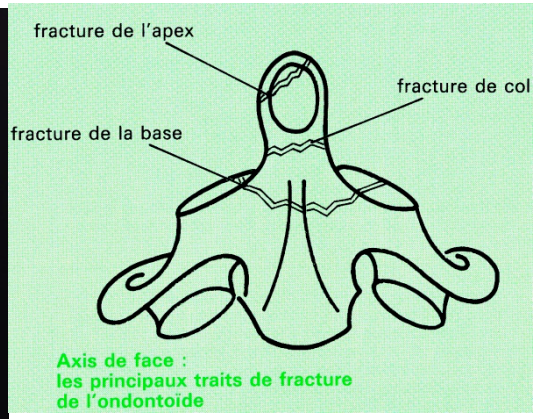
Fracture de la dent de l'axis



Roy-Camille OBAR, OBAV, H

- **Direction du trait de fracture**
- **Déplacement**
- **Diastasis**

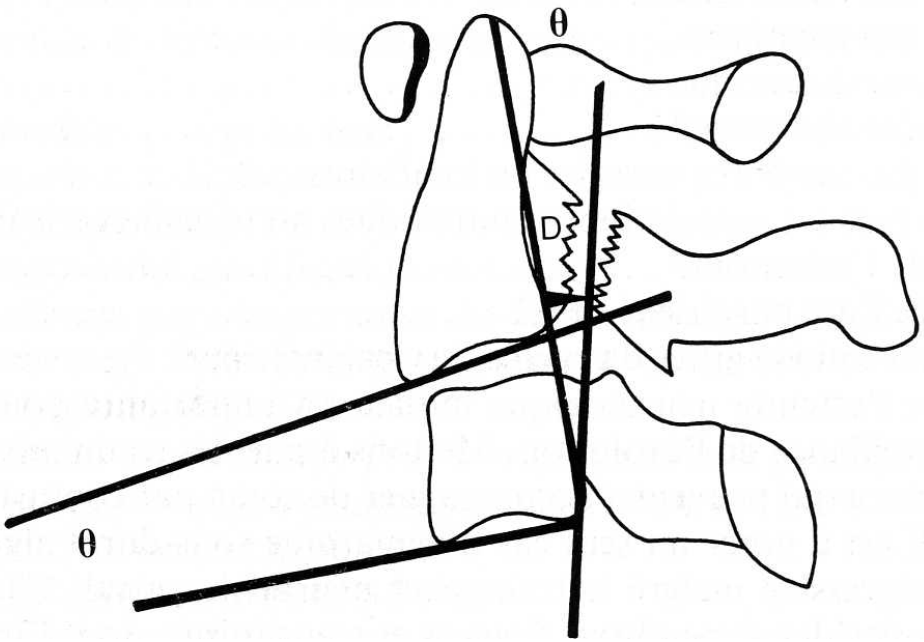


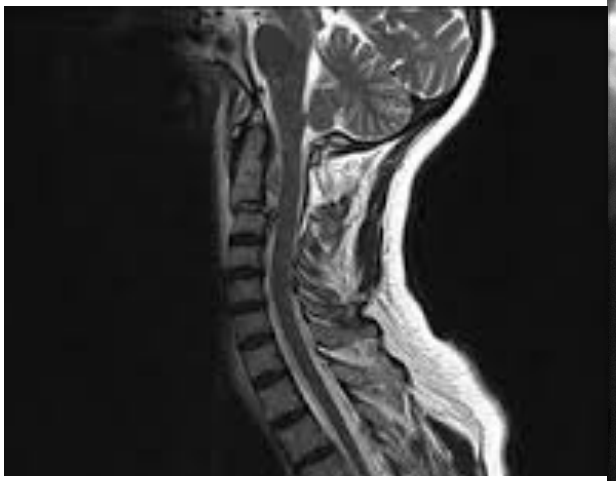


(Anderson et Alonzo)

Vissage direct

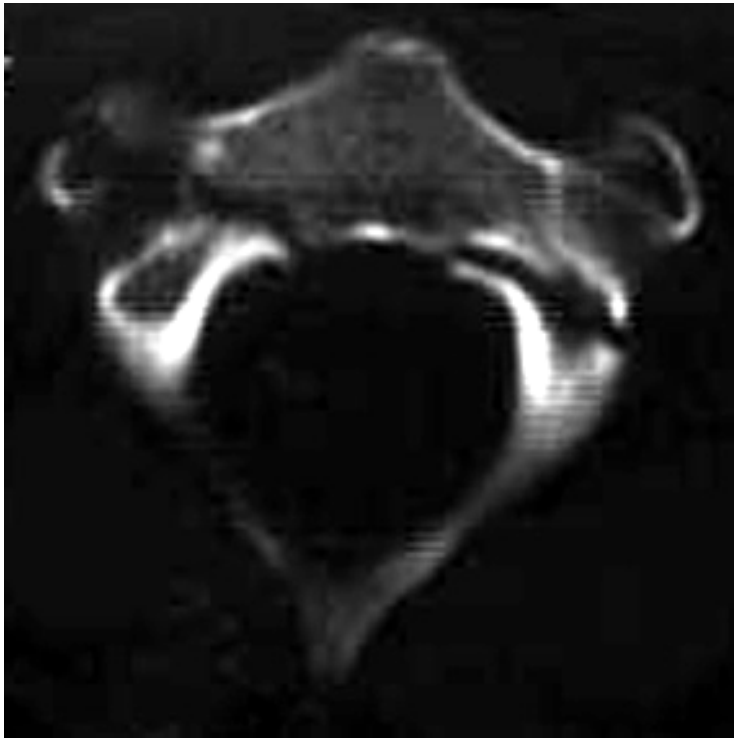
Fractures uni/bi-isthmiques (« pédiculaires ») de l'axis



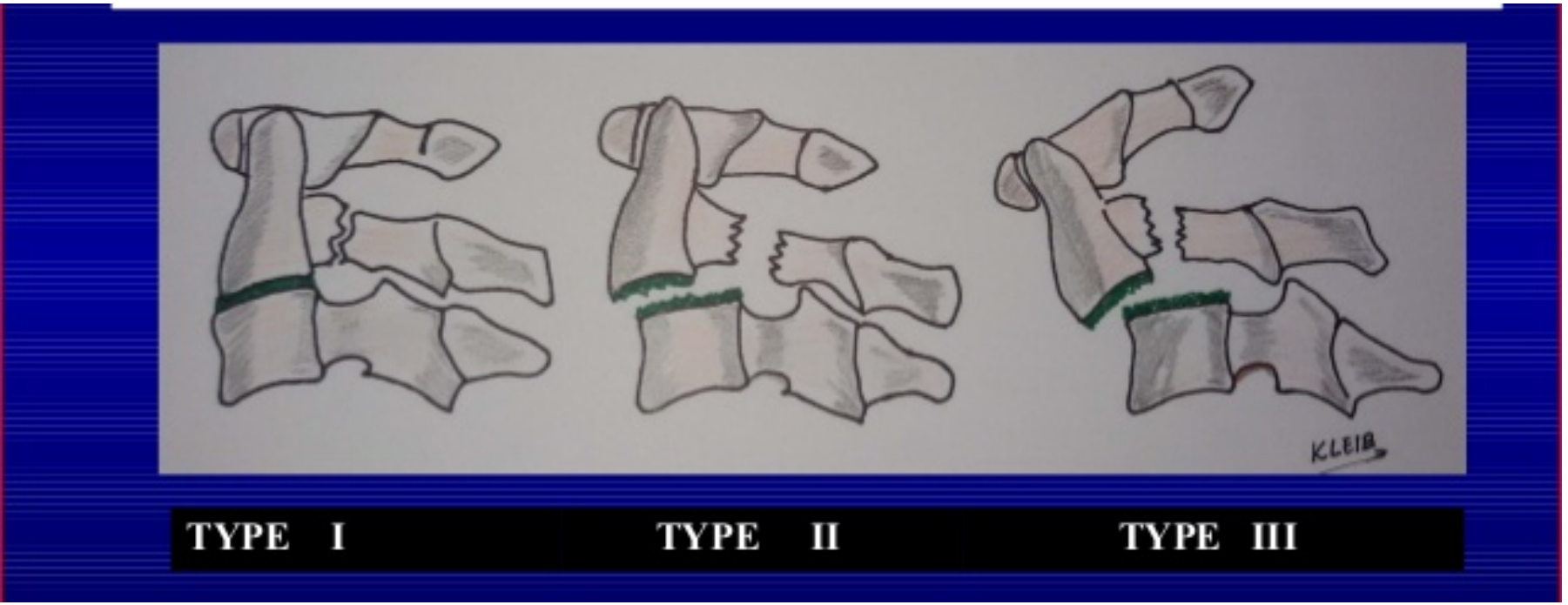


- **D: déplacement antérieur**
- **Cyphose régionale**

- **= subluxation C2-C3**



Bi-pédiculaire ou bi-isthmique?



- **Type I: conservateur**
- **Types II et III: chirurgical**

Luxations occipito-cervicales

LUXATION OCCIPITO - ATLOIDIENNE

Classification

I Luxation antérieure (survivants)
II Distraction pure (mortelle)
III Luxation postérieure (très rare)

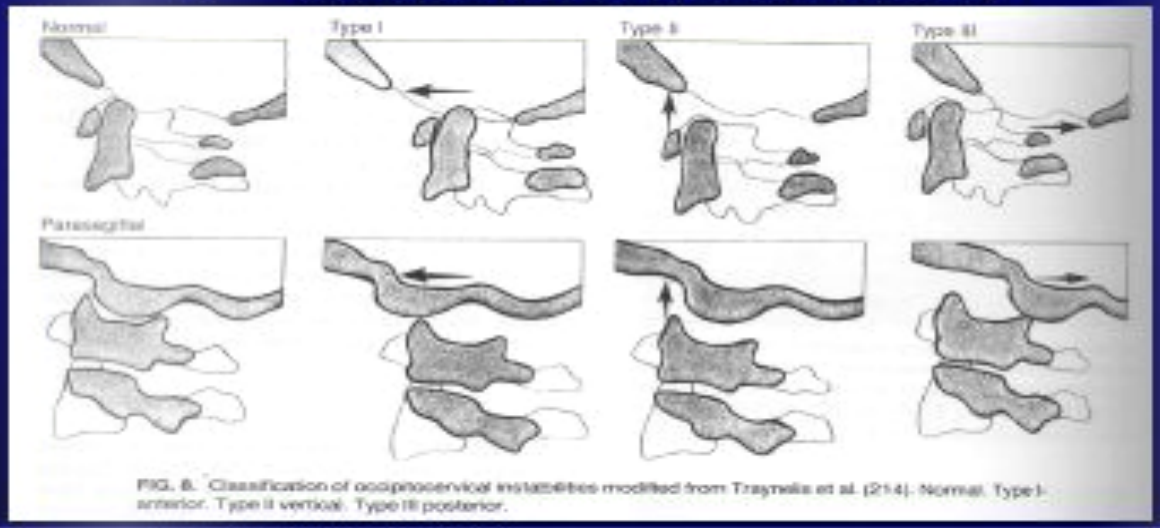
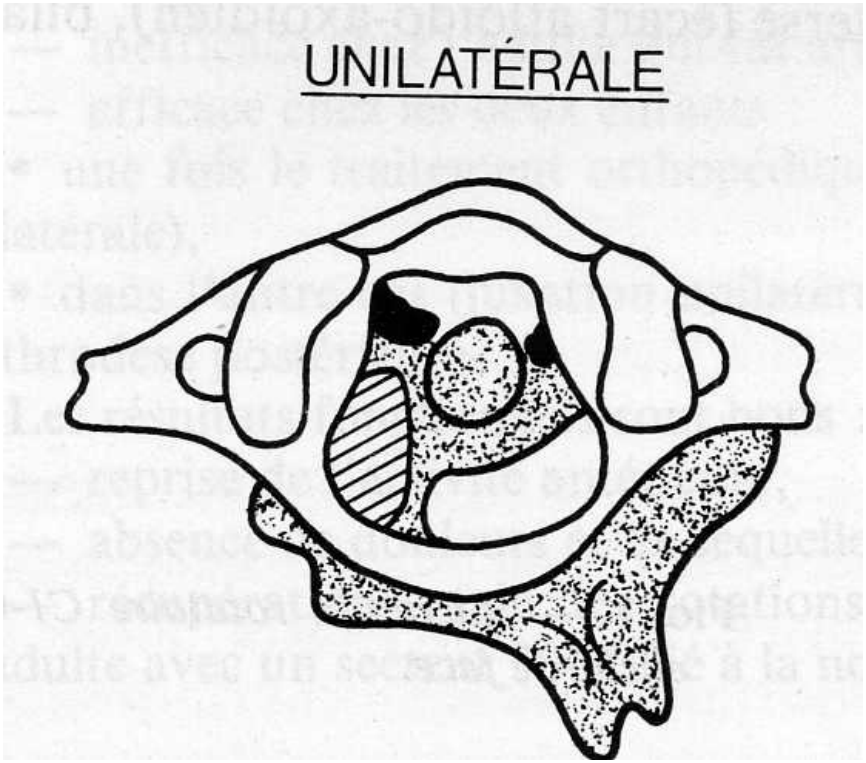
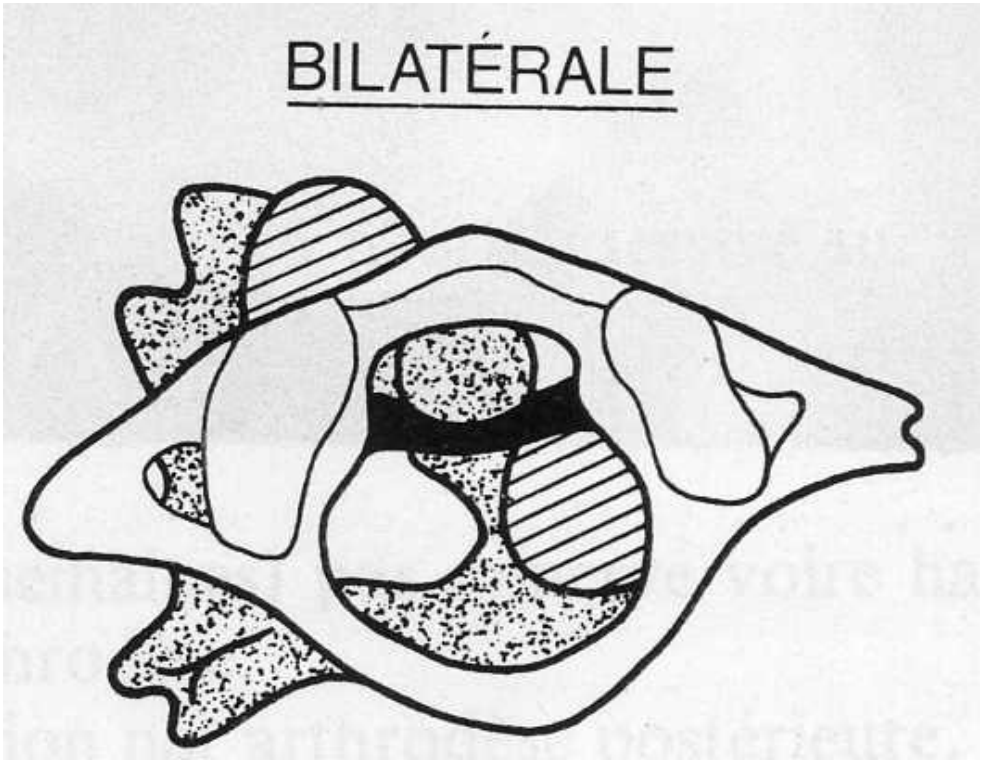


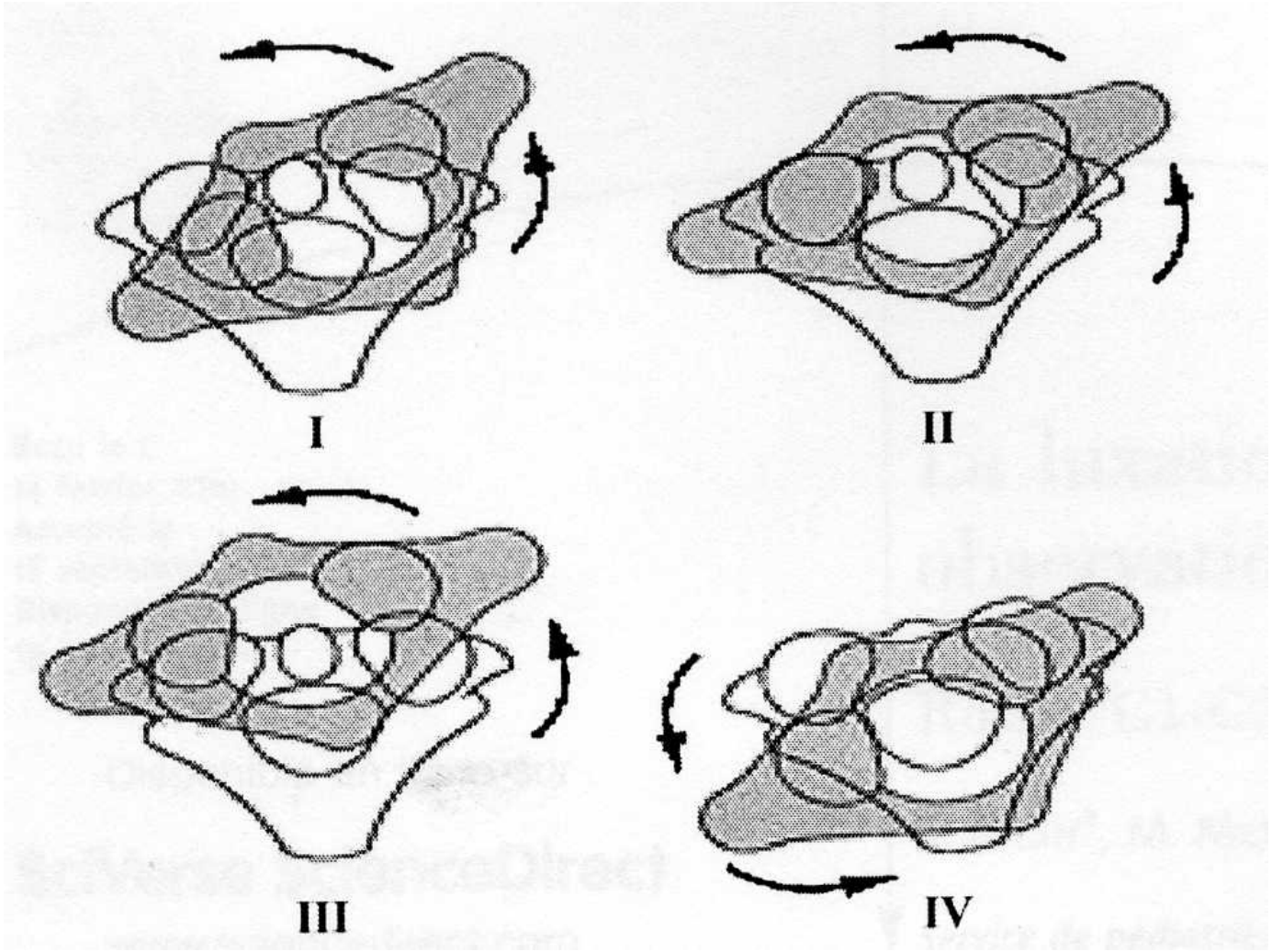
FIG. 8. Classification of occipitocervical instabilities modified from Traynelis et al. (214). Normal. Type I- anterior. Type II vertical. Type III posterior.

Luxations atloïdo-axoïdiennes



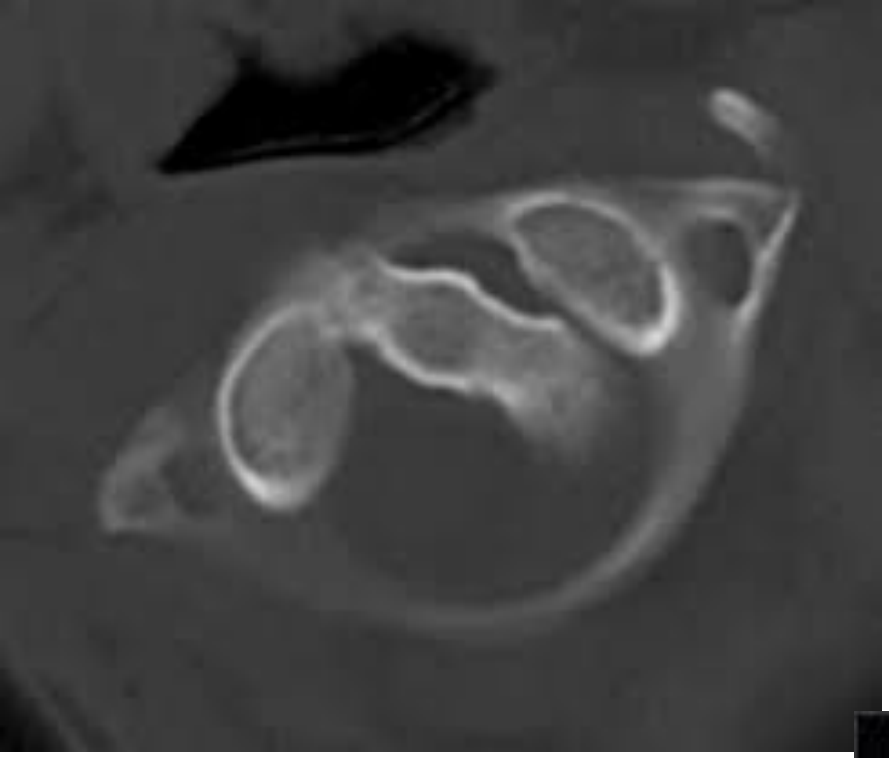


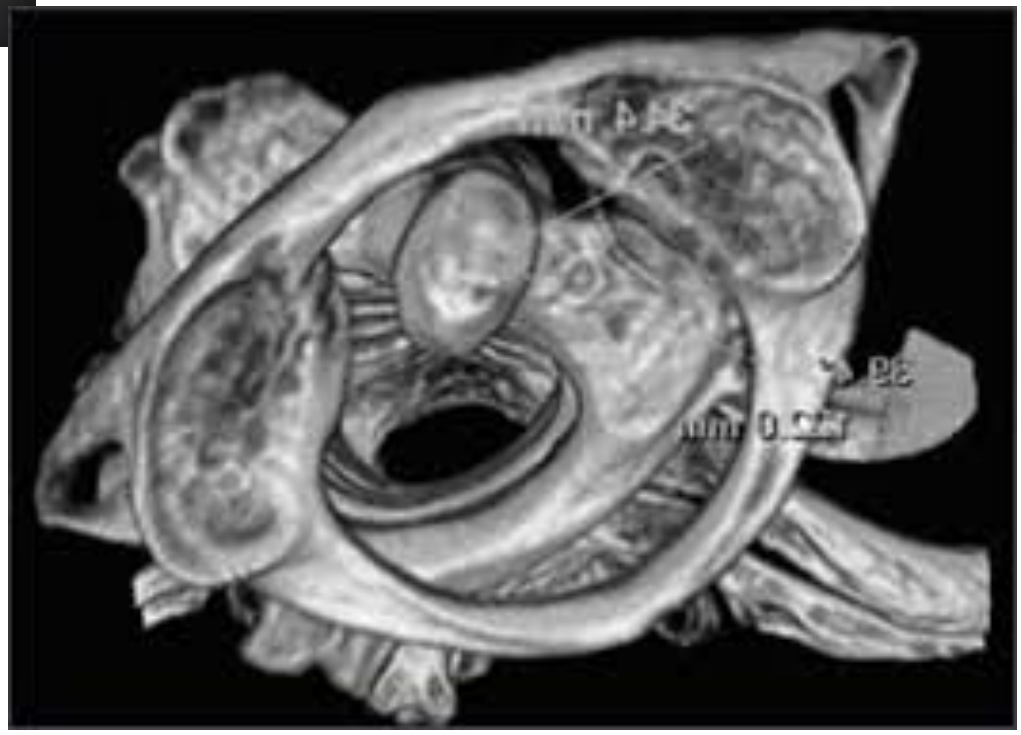
Chez l'adulte: réduction et arthrodèse



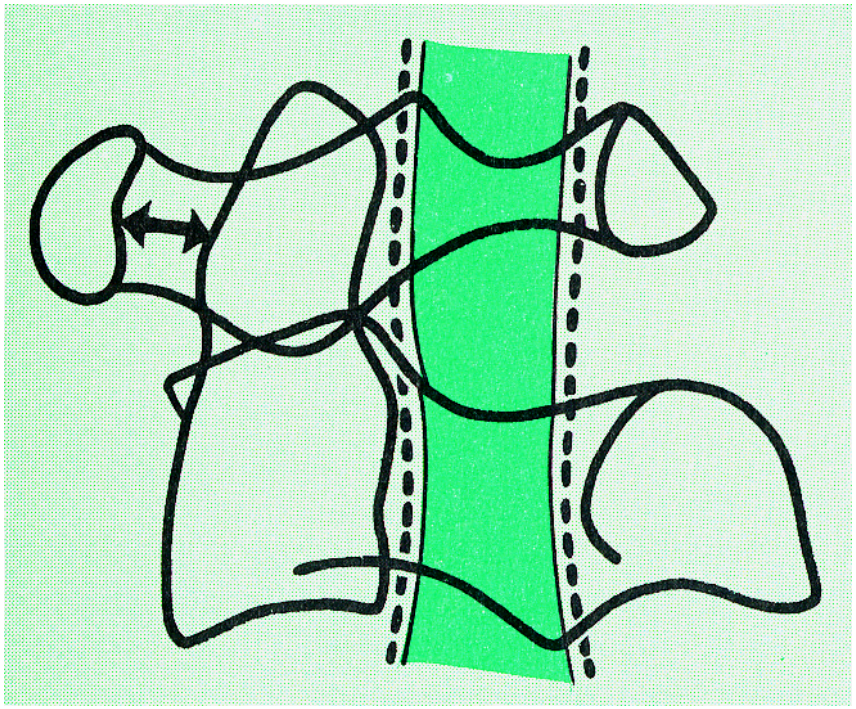
- **Type I: luxation rotatoire simple sans antélisthésis de C1**
- **Type II: luxation rotatoire avec antélisthésis de C1 < ou = 5 mm**
- **Type III: idem > 5 mm**
- **Type IV: luxation rotatoire avec rétrolisthésis de C1**

- **(*Classification de Fielding et Hawkins – 1978)***





Entorse grave C1 – C2



= rupture du ligament transverse

= écart arc antérieur C1-odontoide > 3 mm

Arthrodèse le plus souvent

Lésions traumatiques multiples: association les plus fréquentes dans l'ordre décroissant

- **Fracture bi-isthmique de C2 + fracture de la dent de l'axis**
- **Fracture de la dent de l'axis et fracture de l'arc postérieur de C1**
- **Fracture de la dent de l'axis et facture de Jefferson**
- **Fracture de la dent de l'axis et fracture d'une ou deux zygapophyses supérieures de C2**