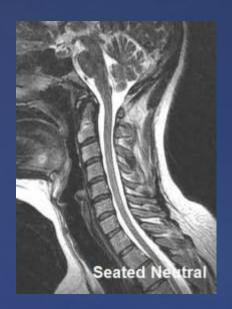
Views used to examine the cervical spine









Cervical Spine

Cervical Spine Angle

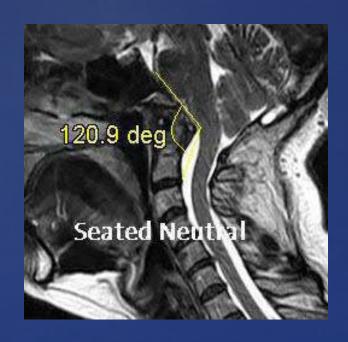






Clivo-vertebral or Clivo-axial angle (normal range 150°-180°).





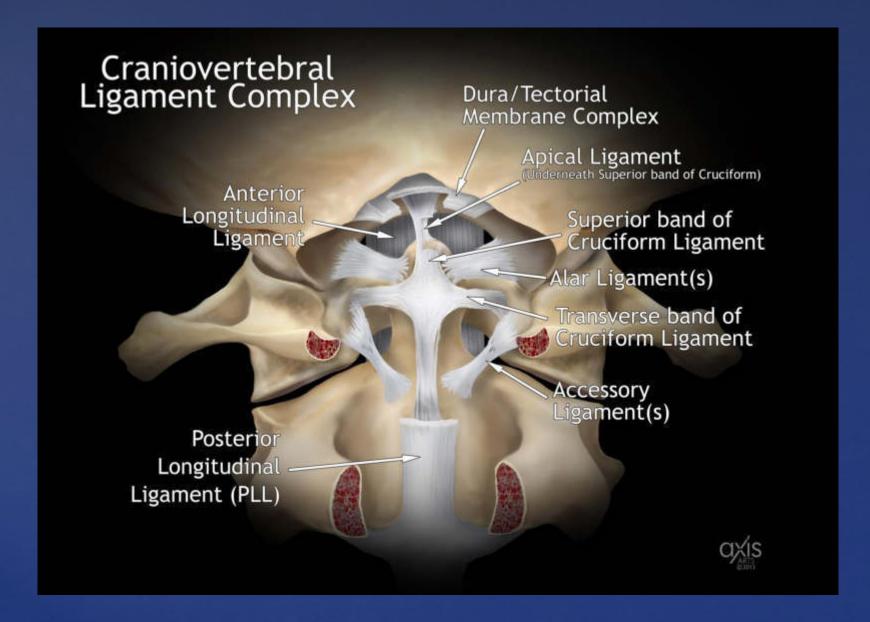




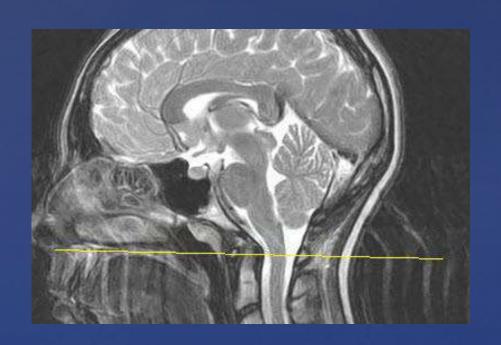
(The Grabb-Oakes measurement is the perpendicular distance from the BpC2 line [Basion to posterior inferior C2 body] to the dura.

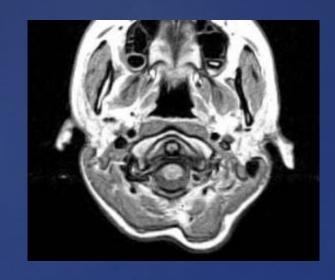
A value greater than or equal to 9 mm indicates ventral brainstem compression)

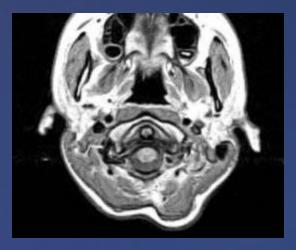
(The basion axial interval is the length of a line drawn between the tip of the basion and a line drawn along the posterior aspect of the odontoid peg. The basion dental interval is a distance measured between the tip of the basion and the tip of the dens. Both these measurements should be less than 12 mm. If they are greater than 12 mm, then occipito-atlantal disassociation has occurred. These measurements are often referred to as "The rule of 12")

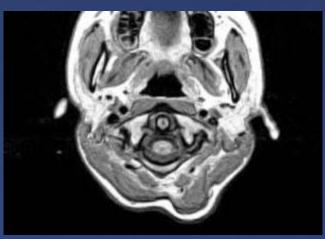


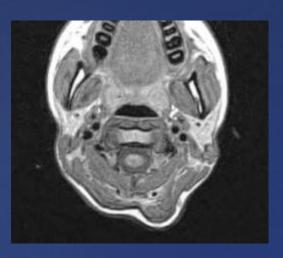
Axial sections in line of the Atlas (C1)









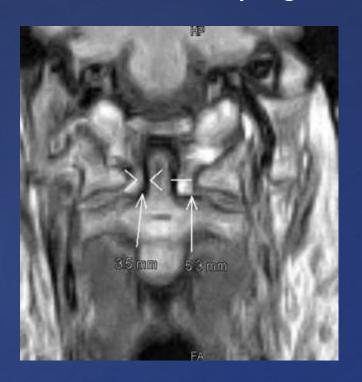


Specific coronal views of the cranio-cervical junction to show the position of the odontoid peg



Normal position of the odontoid peg

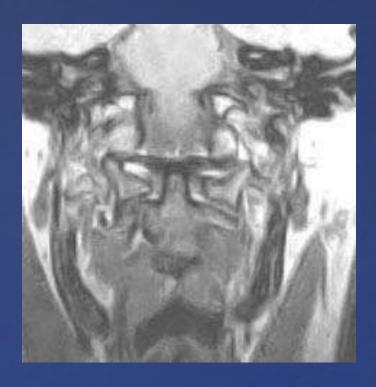
The alar ligaments are intact (arrows)



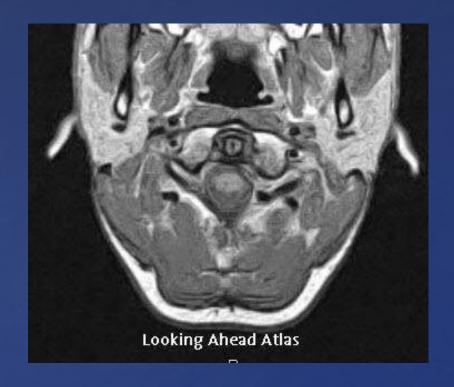
The odontoid peg is deviated to the right

The alar ligaments are not clearly seen due to them being damaged

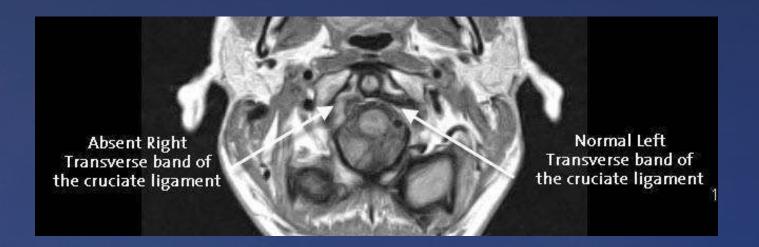
Cranio –vertebral Ligaments

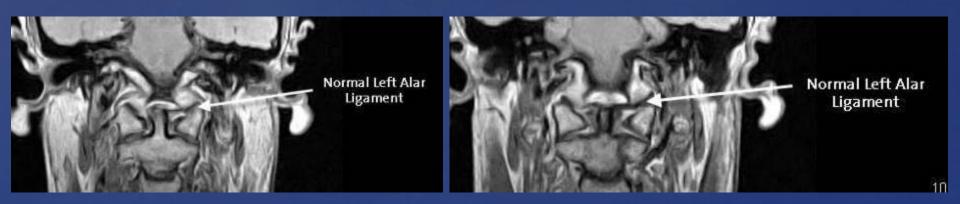


Normal Alar Ligaments



Normal Transverse band of the Cruciate Ligament



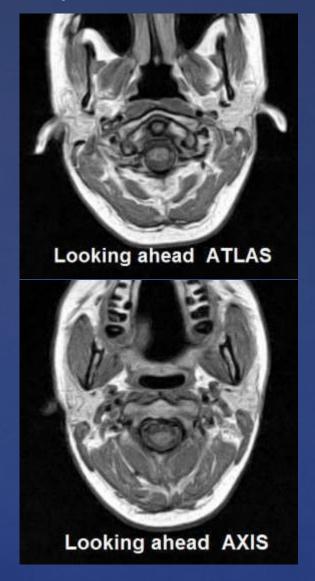




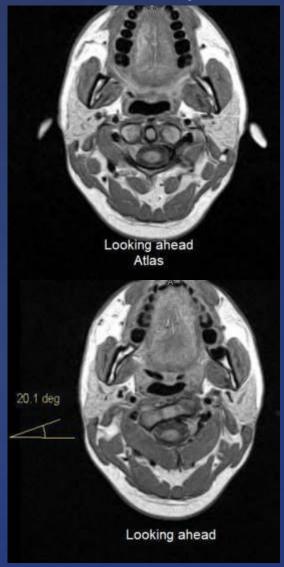
Specific views to assess the atlanto-axial joint



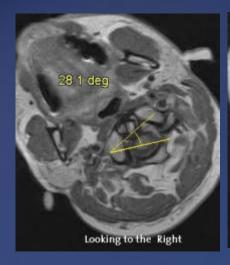
Specific views to assess the atlanto-axial joint

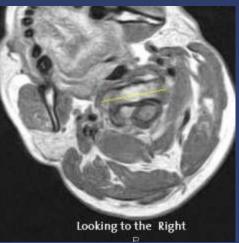


Normal alignment

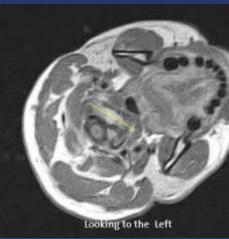


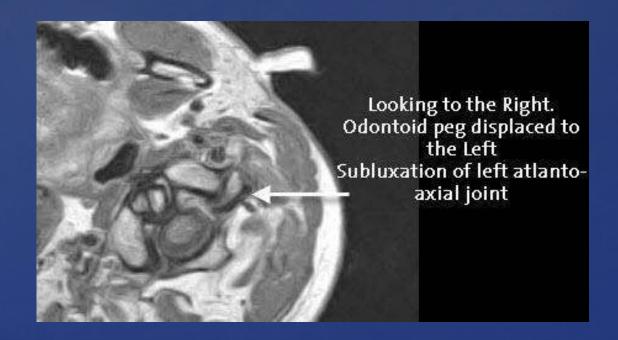
20° of dislocation at the atlanto-axial joint











Method and Materials:

E.D.S. 49 average age 34.5yrs (11 - 64) 42F 7M

Normal control 58 average age 58yrs (22 – 78) 42 F 16 M