

## Vertebral Translations



On the image the vertebra will be numbered in red with the translation measure.

**Image 1A - Vertebral Angulations  
(Cervical Extension)**

Vertebra	Angle (°)	Angulation (°)
C2-3	19.5	-7.7
C3-4	11.8	-9.2
C4-5	2.6	-9.5
C5-6	-6.9	-6.4
C6-7	-13.3	-15.0
C7-T1	-28.3	N/A

Angular motion segment integrity on the cervical extension view is not considered as part of the cervical spine AOMSI determination although it can have relevant clinical considerations and is measured here for clinical observation. (AMA Guides)

**Image 1A - Vertebral Translations (Cervical Extension)**

Vertebra	A - Translation (mm)	B - Diameter (mm)	A/B Ratio (%)	Result
C3	4.1 posterior	18.1	22.7	Ratable
C4	4.1 posterior	18.7	21.9	Ratable
C5	3.6 posterior	19.1	18.8	Normal
C6	2.8 posterior	21.1	13.3	Normal
C7	1.0 posterior	21.1	4.7	Normal

Translational motion is measured by determining the anteroposterior motion of one vertebra over another. A diagnosis of AOMSI in the cervical spine by translational loss of motion segment integrity measurements requires greater than 20% anterior OR greater than 20% posterior relative translation of one vertebra on another, on flexion OR extension radiographs, respectively. (AMA Guides 6th Ed.)

**Image 1A - George's  
Line Angles  
(Cervical Extension)**

Vertebra	Angle (°)
C2-3	-6.1
C3-4	-12.4
C4-5	-7.6
C5-6	-11.3
C6-7	-7.4

## FINDINGS AND IMPRESSIONS

Cervical Spine - Lateral Extension:

- The angle of curvature between the C2 and C7 vertebrae is -44.8 degrees.

The rating Result column on the Angulation Table does not appear on the Extension or Neutral view.

## Translation Table

For each vertebra specified in the Vertebral Translation table:

- The diameter is obtained by taking the average of all the diameter values for that vertebra.
- The translation-to-diameter ratio (of A/B ratio) is now computed using the average vertebra diameter.

### Rating Result Column

This column will appear when the image is a Flexion or an Extension view. It is not included when the image is a Neutral view.

(Also reference the Legend below the Translation table.)

Result	Description
<b>Normal</b>	'Normal' will appear in black font color if the A/B ratio of the corresponding vertebra is less than or equal to 20%.
<b>Ratable</b>	'Ratable' will appear in red font color if the A/B ratio of the corresponding vertebra is greater than 20%.

You will have the option to add the Table of George's Line Angles to your AOMSI report, even if you did not select the George's Line measure on the **Advanced Line Analysis** button. This is due to all the George's Line points are included within the Vertebral Angulation or Translation measures.