Interpedicular distance

The interpedicular (IP) distance which is the distance measured between the pedicles on frontal / coronal imaging of the spinal canal.

Lumbar

Illustrations showing the methods of measuring the interpedicular distance (A), midsagittal diameter, and lateral recess depth (B). Abbreviations: A, interpedicular distance; AP, anteroposterior distance; B, midsagittal diameter; IPD, interpedicular distance; R, lateral recess depth.

Mean is minimum at L1 (24.0 mm in male and 23.3 mm in female) and maximum at L5 (30.9 mm in male and 29.8 mm in female) showing a gradual increase from level L1 to L5.

It can be narrowed in a number of situations

The lumbar interpedicular distance in 100 children aged 3-15 years have been determined radiologically before and after correction for magnification in the different age groups. The increase by age was approximately 2.5 mm in the upper four lumbar levels and 3.3 mm in L5. The difference between the vertebral levels was almost similar in the different age groups. A rather weak correlation between the interpedicular distance and the sagittal diameter of the spinal canal was found, strongest at the fourth lumbar level. No correlation was found between the interpedicular distance and the size of the pedicles.

Cervical

Interpedicular distance (average)

Radiography (Anteroposterior)

X-ray computed tomography

Magnetic resonance imaging

C3 25-31 mm

C4 26-32 mm

C5 26-33 mm
C6 26-33 mm

C7 24-32 mm

1) http://www.indmedica.com/journals.php?journalid=8&issueid=77&articleid=1008&action=article