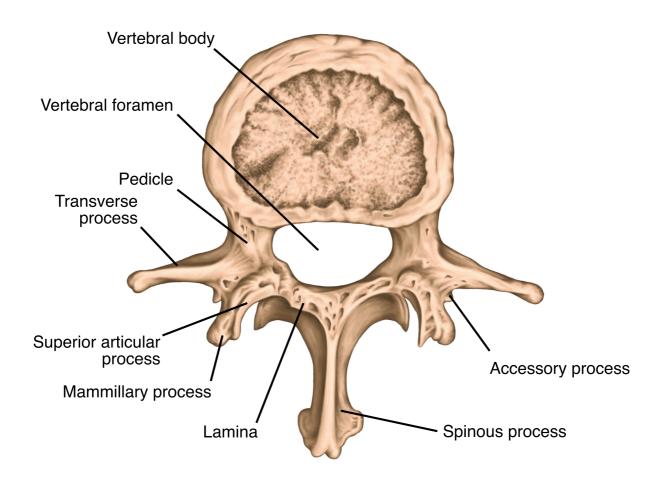
Pedicle Anatomy Diagram



Location and structure

Pedicles are cylindrical or oval in shape and located on the back of each **vertebra**, connecting the vertebral body to the laminae. They provide essential strength and stability to the spine.

Function

Pedicles support the posterior parts of the vertebrae and form the **vertebral arch**, which protects the spinal cord. They also connect the vertebral body to the **transverse processes and lamina**, helping to create the vertebral foramen through which the spinal cord passes.

Clinical importance

Pedicles are crucial landmarks in spinal surgery, especially for inserting **pedicle screws**. These screws stabilize the spine in cases of deformities, fractures, or degenerative conditions.

Surrounding parts

- Vertebral body: The large, cylindrical front portion of the vertebra that bears most of the weight.
- Vertebral foramen: The central opening through which the spinal cord passes.
- **Transverse process:** Lateral projections on each side of the vertebra, serve as attachment points for muscles and ligaments.
- **Superior articular process:** Projections that articulate with the inferior articular processes of the vertebra above.
- **Mammillary process:** A small bump on the superior articular process, providing additional muscle attachment.
- Lamina: The part of the vertebral arch that forms the roof of the vertebral foramen.
- **Spinous Process:** The posterior projection that can be felt through the skin, providing attachment for muscles and ligaments.
- Accessory process: A small projection on the transverse process, serving as an additional attachment point for muscles.

Additional no

References

Gray, H., & Standring, S. (2008). *Gray's anatomy: The anatomical basis of clinical practice (40th ed.).* Churchill Livingstone Elsevier.

Moore, K. L., Dalley, A. F., & Agur, A. M. R. (2018). *Clinically oriented anatomy (8th ed.)*. Wolters Kluwer.

Scientific Research Publishing. (2018). *Figure 3. Illustration of lumbar vertebrae showing vertebral body,...* ResearchGate. https://www.researchgate.net/figure/lllustration-of-lumbar-vertebrae-showing-vertebral-body-pedicles-facets-transverse_fig3_323804926