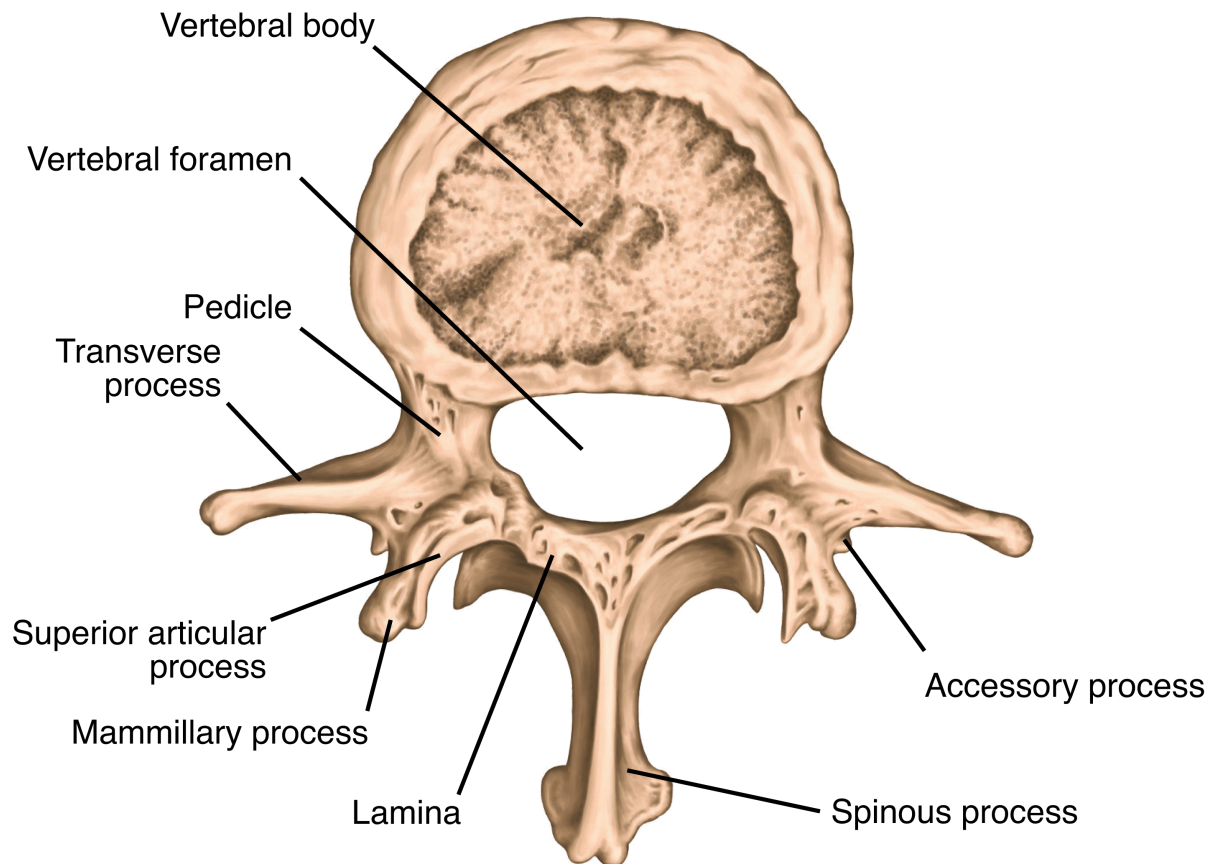


# Pedicle Anatomy Diagram

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## 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.

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## 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.

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## 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.
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## Additional notes

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## 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/Illustration-of-lumbar-vertebrae-showing-vertebral-body-pedicles-facets-transverse\\_fig3\\_323804926](https://www.researchgate.net/figure/Illustration-of-lumbar-vertebrae-showing-vertebral-body-pedicles-facets-transverse_fig3_323804926)