

Lumbar Spine Anatomy

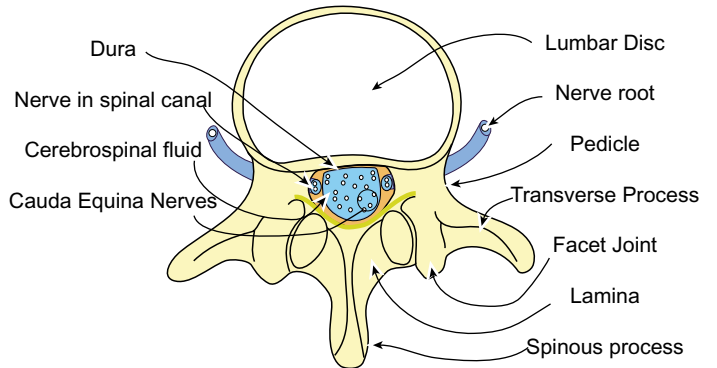
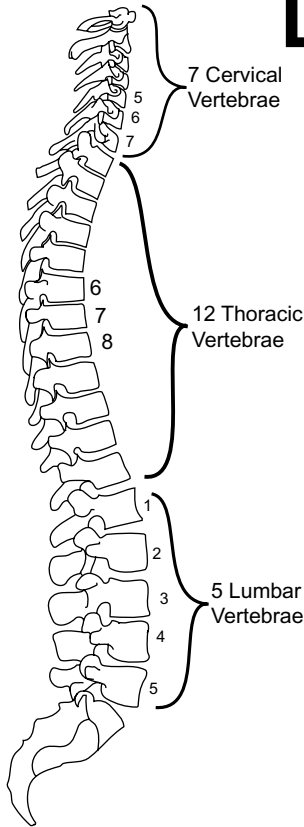
(An Introduction)

The Bones

The spine is made up from regions that contain vertebrae (blocks of bone) which are stacked on top of one another. The lumbar spine is made up of 5 lumbar vertebrae that are on top of the sacrum and have the thoracic bones above which are supporting the ribs. Each Lumbar vertebra has specific features that you will hear discussed when you are talking to your doctor. This is to try and simplify these terms.

The block of bone at the front between the discs is called the vertebral body. Sticking out from the back are two pieces of bone called pedicles. Attached to the pedicles are the other parts of the lumbar vertebra.

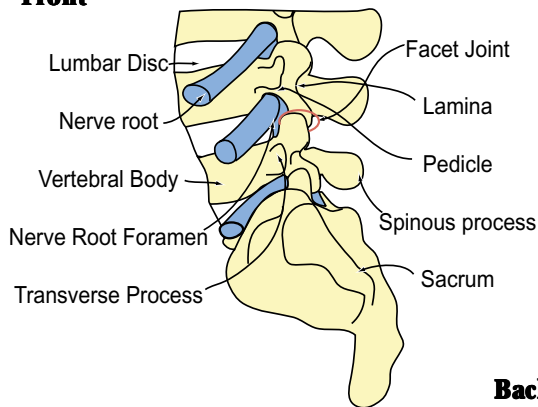
To stop the vertebra rotating and slipping forward are special joints called facet joints. In the pictures from the side and behind you can see how they do this.



Slice through lumbar vertebra and disc

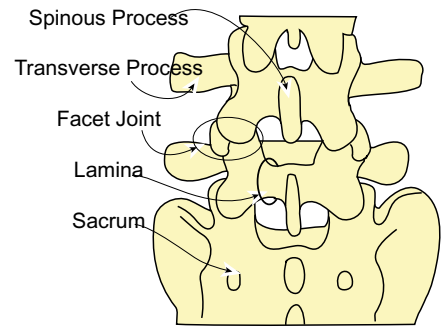
The bone attached to the pedicle bridges across the back to form a circular ring. When the vertebra are stacked on top of one another these rings form a tube called the spinal canal. This contains the nerves from the spinal cord (which stops at the top of the lumbar spine) called the cauda equina (looks like horses tail). These nerves are protected by the lining of dura around them and by cerebrospinal fluid which bathes them. Every now and then a nerve leaves this and goes out through the foramen to go to supply the leg.

Front



Side Picture of Spine

Back Picture of Spine



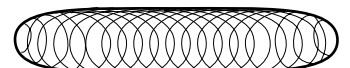
The Disc

It is made up of two components. An outer capsule (anulus fibrosus) and a soft centre (nucleus pulposus). The capsule (made from laminated fibres) holds in the soft contents and this allows movement of the vertebrae on one another. It can be likened to a tube of toothpaste only the contents is much thicker and it is like soft rubber.

Disc cut in half



Side of disc



When the Vertebra are stacked on top of one another you can see that there is a space for a nerve to come out between the pedicles and behind the disc. Each nerve is numbered by the pedicle it comes out under (i.e. lumbar root 5[L5] comes out under the pedicle of the 5th lumbar vertebra). Each nerve has a specific function in the control of movement in the legs. The sacral nerves control bowel and bladder function

