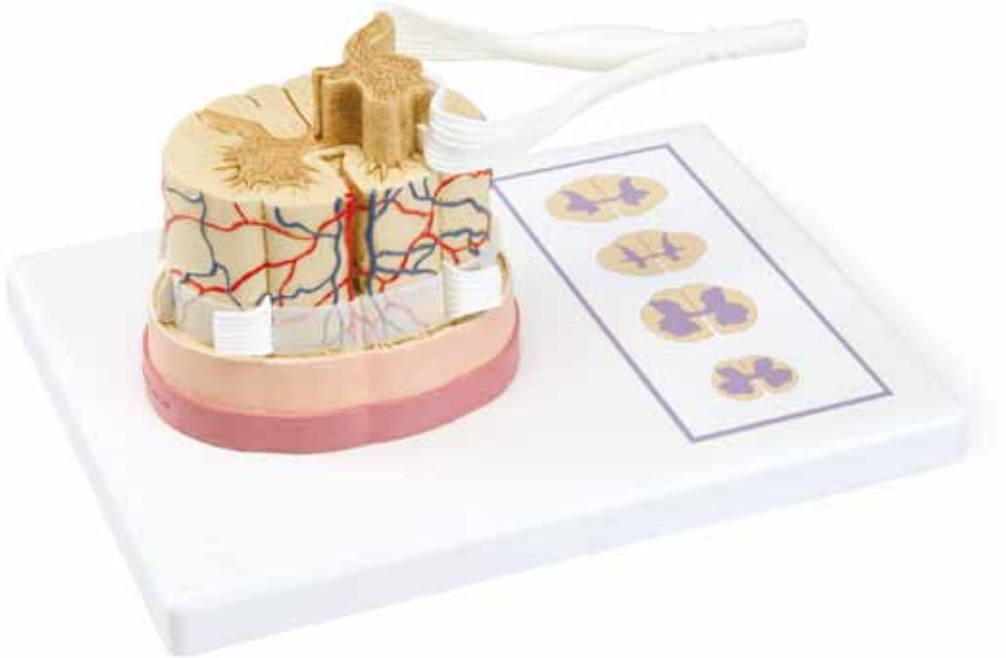




*...going one step further*



**C41**  
(1000238)

**Latin**

- 1 Fila radicularia
- 2 Radix posterior
- 3 Ganglion sensorium nervi spinalis
- 4 Truncus nervi spinalis
- 5 R. posterior
- 6 R. anterior
- 7 R. communicans
- 8 R. meningeus
- 9 Radix anterior
- 10 Lig. denticulatum
- 11 Dura mater spinalis
- 12 Arachnoidea mater spinalis
- 13 Spatium subarachnoideum
- 14 Pia mater spinalis
- 15 A. spinalis anterior
- 16 Vv. spinales anteriores
- 17 Substantia grisea
- 18 Substantia alba
- 19 Cornu posterius
- 20 Cornu anterius
- 21 Commissura grisea
- 22 Sulcus posterolateralis
- 23 Sulcus intermedius posterior
- 24 Sulcus medianus posterior
- 25 Fissura mediana anterior
- 26 Commissura alba
- 27 Canalis centralis
- 28 Sulcus anterolateralis
- 29 Septum medianum posterius
- 30 Pars cervicalis
- 31 Pars thoracica
- 32 Cornu laterale
- 33 Pars lumbalis
- 34 Pars sacralis



# Spinal column with nerve endings

English

The model is an enlarged 5:1 scale model of how the spinal cord is constructed.

The spinal cord is composed from both grey and white matter. The grey matter is on the inside and encloses the central channel. The white matter faces towards the outside.

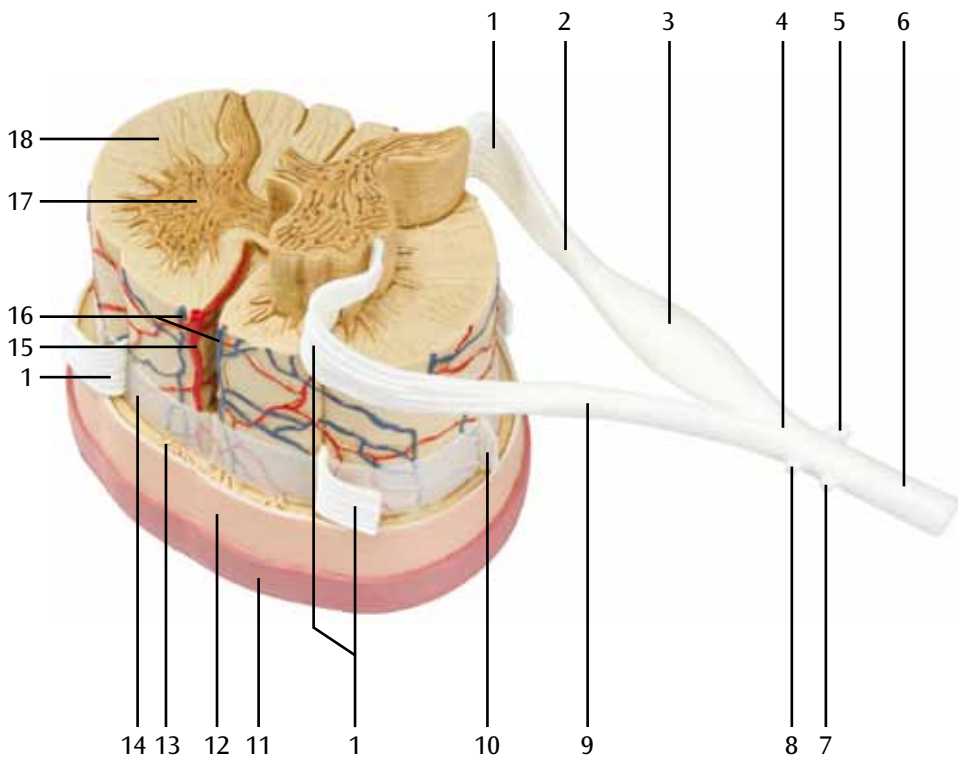
The surface of the spinal cord has a groove running down the middle along the length of the front-facing side (*fissura median anterior*).

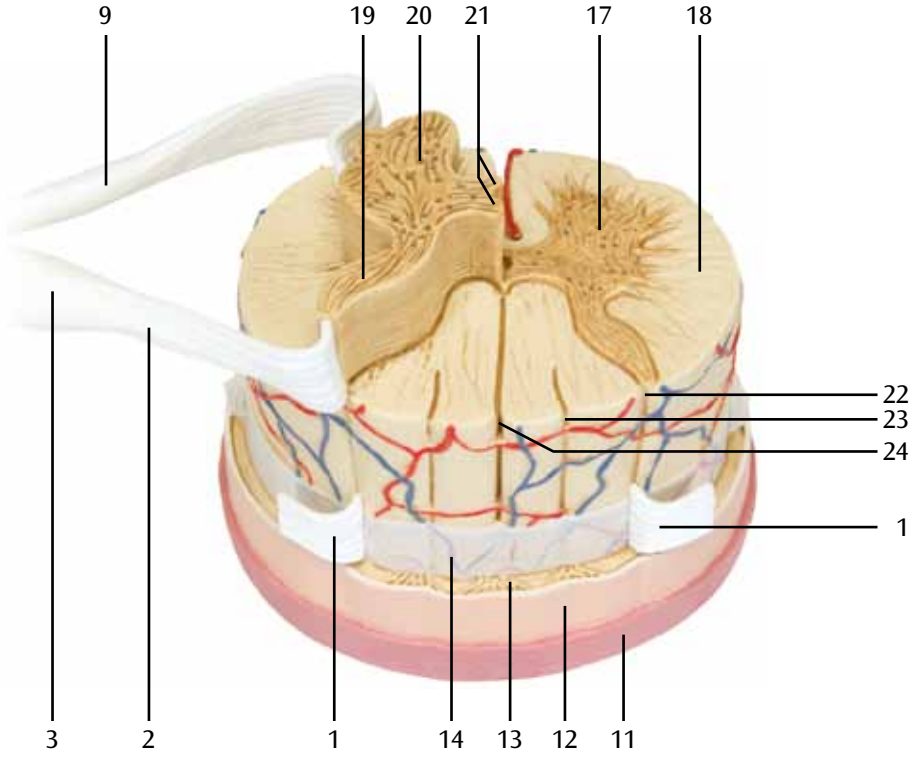
Beside this, another fissure can be seen also running lengthways (*sulcus anterolateralis*). Some shallow fissures can also be seen on the surface of the spinal cord facing the rear. The *sulcus medianus posterior* is situated in the middle and on either side of this appear the fissures called *sulcus posterolateralis*. Alongside, in the cervical and upper thoracic regions, there is another intermediate fissure (*sulcus intermedius posterior*). Inside the spinal cord, a separating membrane or septum (*septum intermedius posterior*) meets the *sulcus medianus posterior*.

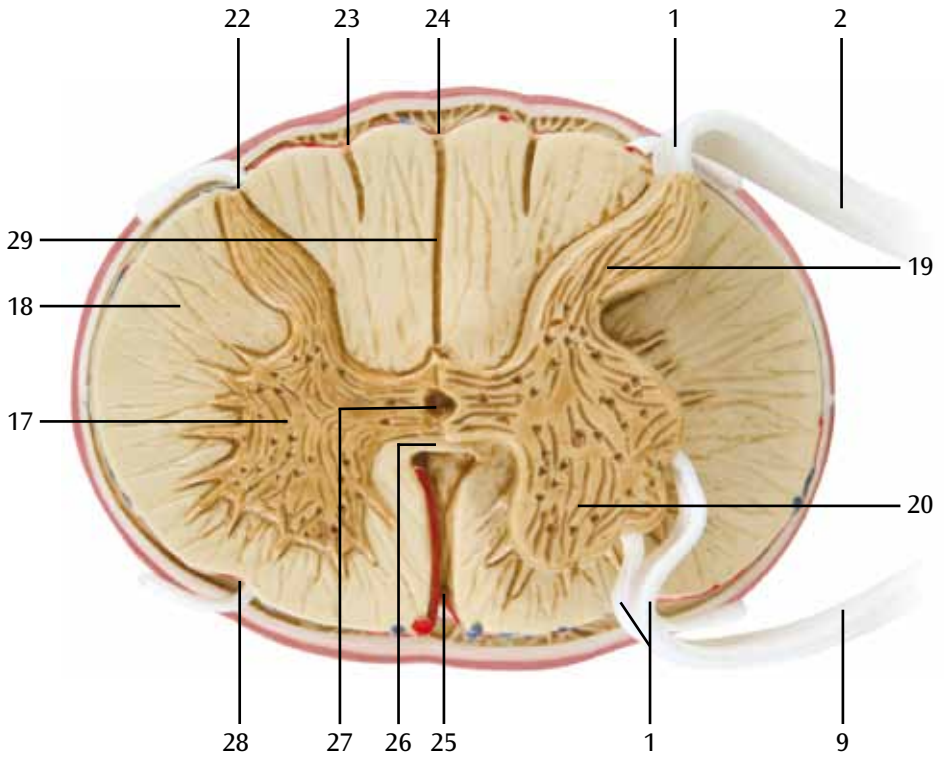
Bundles of nerves called roots (*fila radicularia*) emerge from the front of the spinal cord and lead back into it at the rear. They form the ventral (*radix anterior*) and dorsal (*radix posterior*) roots. Near the roots at the rear, shortly before the ventral and dorsal roots join back together, are located the spinal ganglia. The spinal nerve is formed by the join between the ventral and dorsal roots. It divides into four branches: a front branch (*ramus anterior*), rear branch (*ramus posterior*), linking branch (*ramus communicans*) and a branch that serves the cerebral membrane (*ramus meningeus*). The spinal column is surrounded by three encompassing layers, the hard spinal layer (*dura mater spinalis*), an outer soft layer or web (*arachnoidea mater spinalis*) and an inner soft layer (*pia mater spinalis*). Between the web and the inner layer lies the subarachnoidal space.

The stand depicts the cross sections at the cervical, thoracic, lumbar and sacral regions of the spine. A comparison shows that the cross sections differ enormously in the various regions. The white matter is broadest in the cervical or neck region and narrows down towards the sacral region. The grey matter, that takes on a so-called butterfly form, also changes its shape and composition in the various regions.

- |                           |                                  |
|---------------------------|----------------------------------|
| 1 Rootlets                | 18 White matter                  |
| 2 Posterior root          | 19 Posterior horn                |
| 3 Spinal ganglion         | 20 Anterior horn                 |
| 4 Trunk of spinal nerve   | 21 Gray commissure               |
| 5 Posterior ramus         | 22 Posterolateral sulcus         |
| 6 Anterior ramus          | 23 Posterior intermediate sulcus |
| 7 Ramus communicans       | 24 Posterior median sulcus       |
| 8 Meningeal branch        | 25 Anterior median fissure       |
| 9 Anterior root           | 26 White commissure              |
| 10 Denticulate ligament   | 27 Central canal                 |
| 11 Spinal dura mater      | 28 Anterolateral sulcus          |
| 12 Spinal arachnoid mater | 29 Posterior median septum       |
| 13 Subarachnoid space     | 30 Cervical region               |
| 14 Spinal pia mater       | 31 Thoracic region               |
| 15 Anterior spinal artery | 32 Lateral horn                  |
| 16 Anterior spinal veins  | 33 Lumbar region                 |
| 17 Grey matter            | 34 Sacral region                 |



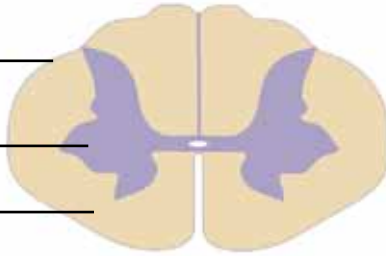




30

17

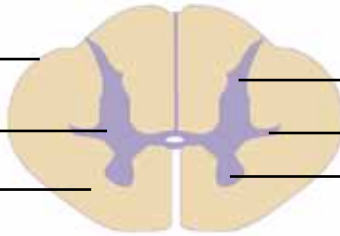
18



31

17

18



19

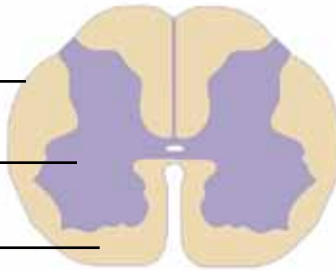
32

20

33

17

18



34

17

18

