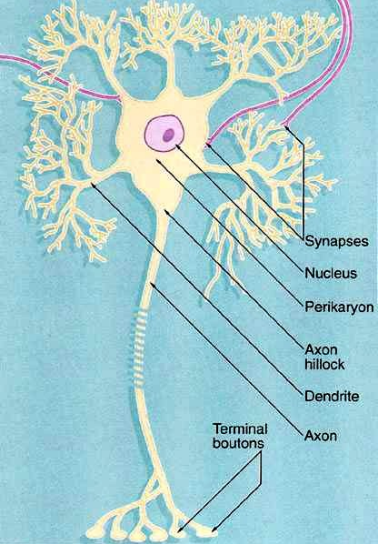
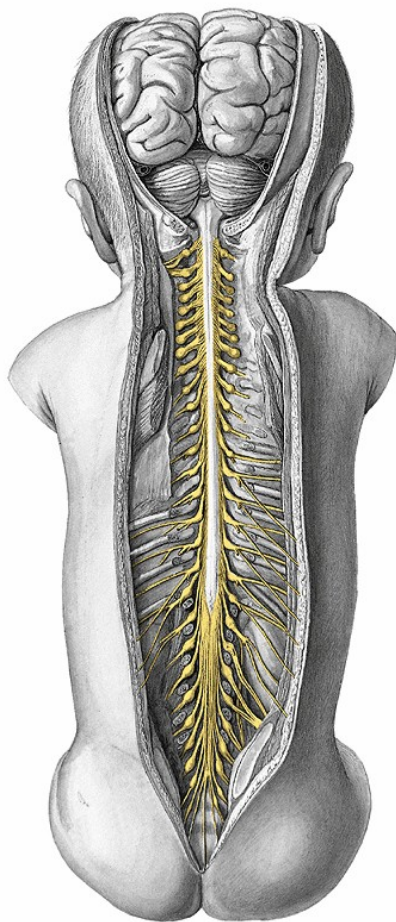


Topography of the back



Excitability
Conductibility



Central nervous system (CNS)

Brain

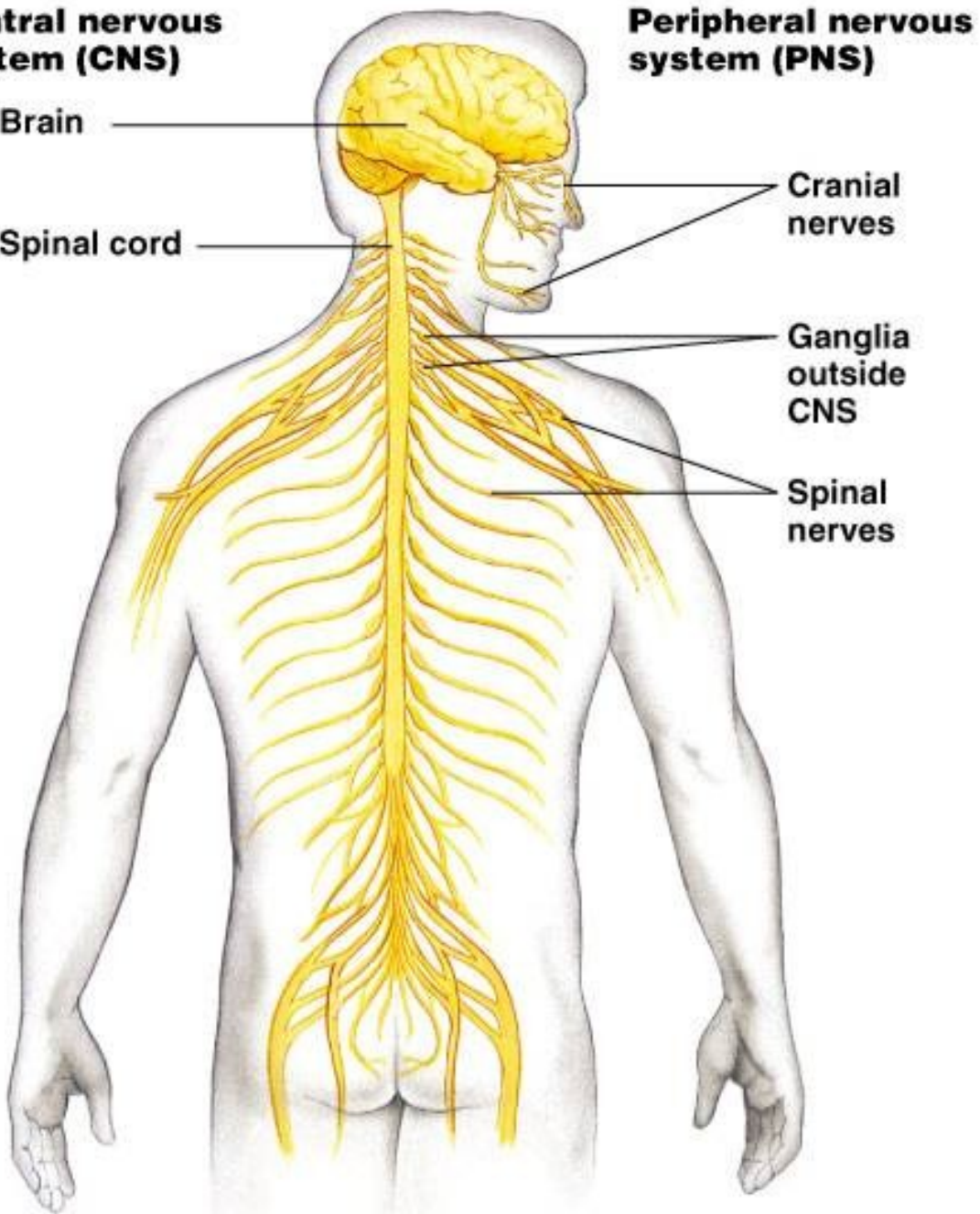
Spinal cord

Peripheral nervous system (PNS)

Cranial nerves

Ganglia outside CNS

Spinal nerves



Division of the periphery nerve system

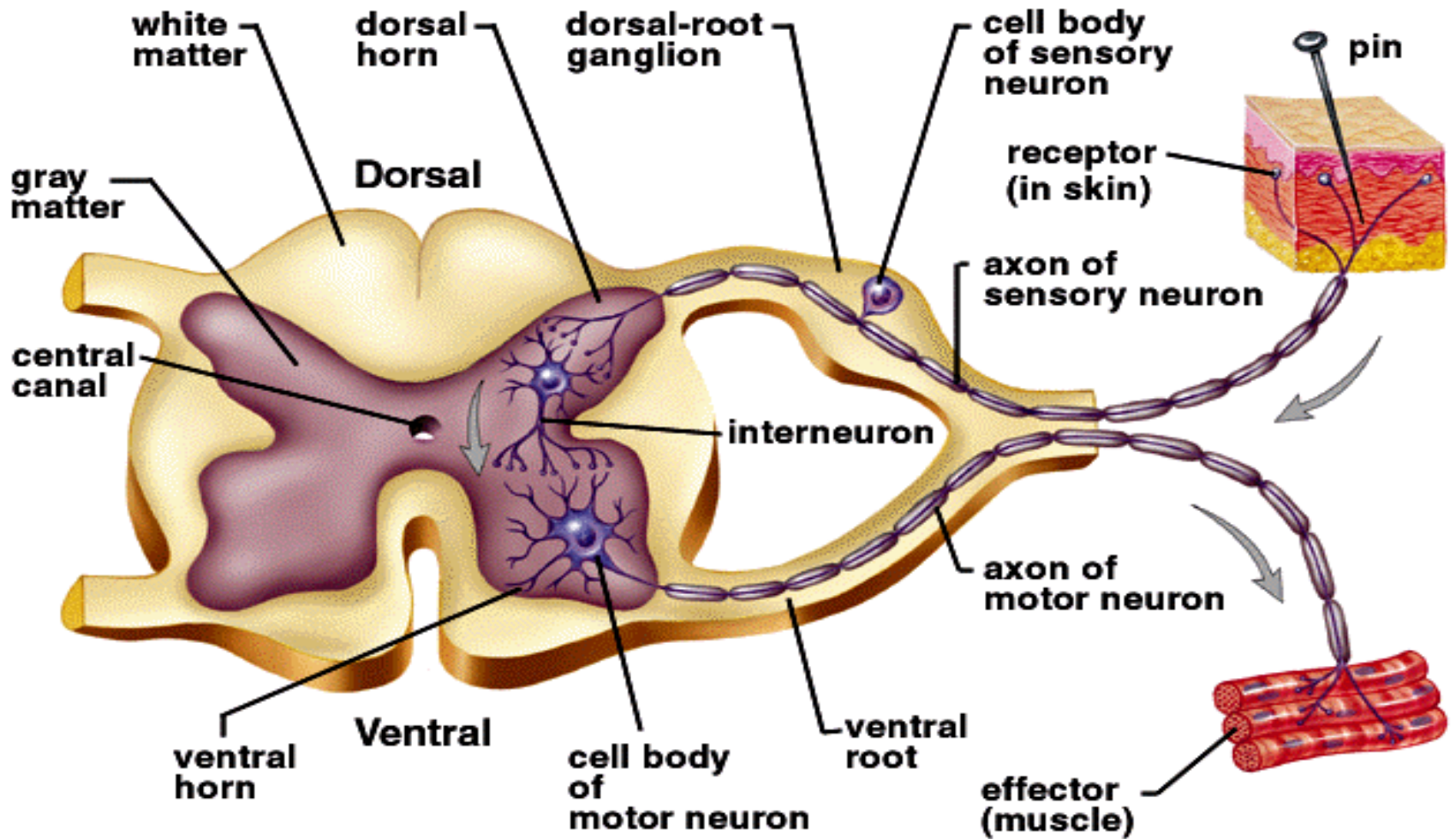
Cranial nerves (I.- XII. pairs)

- pass through the skull base

Spinal nerves – 31 pairs

- pass through foramina intervertebralia

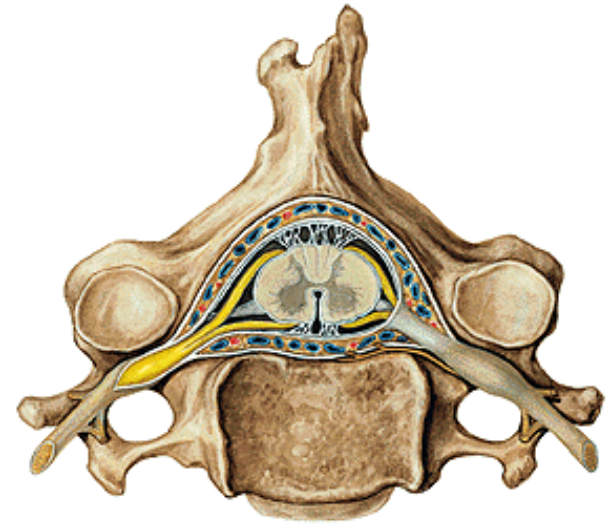
SPINAL NERVES





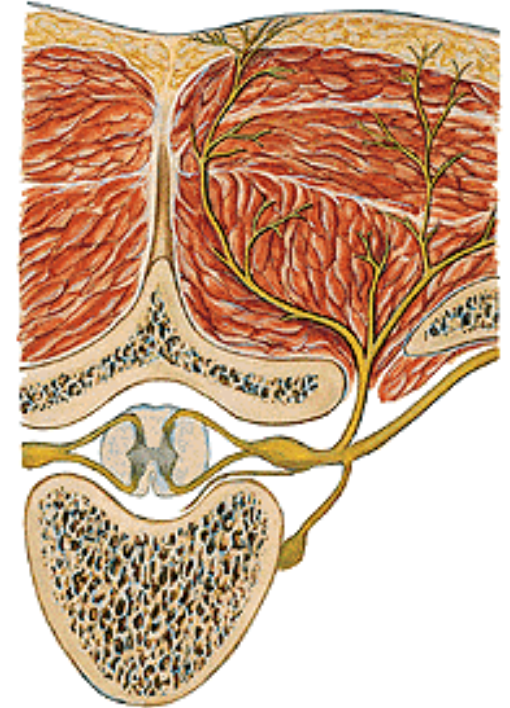
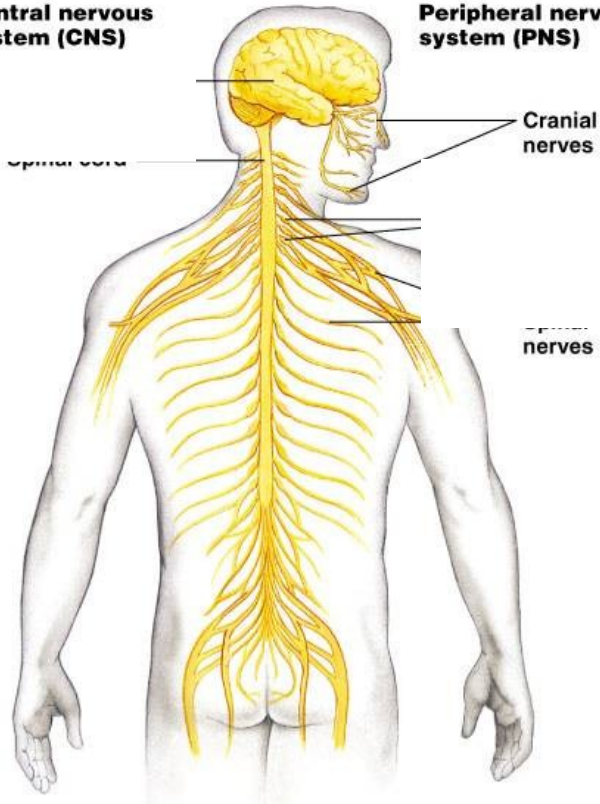
Spinal nerve

- 1) dorsal branch
- 2) ventral branch



Central nervous system (CNS)

Peripheral nervous system (PNS)



Nervi spinales – 31 pairs *(spinal nerves)*

1) Rami dorsales (dorsal branches)

1. **N. suboccipitalis**
2. **N. occipitalis major**
3. **N. occipitalis tertius**

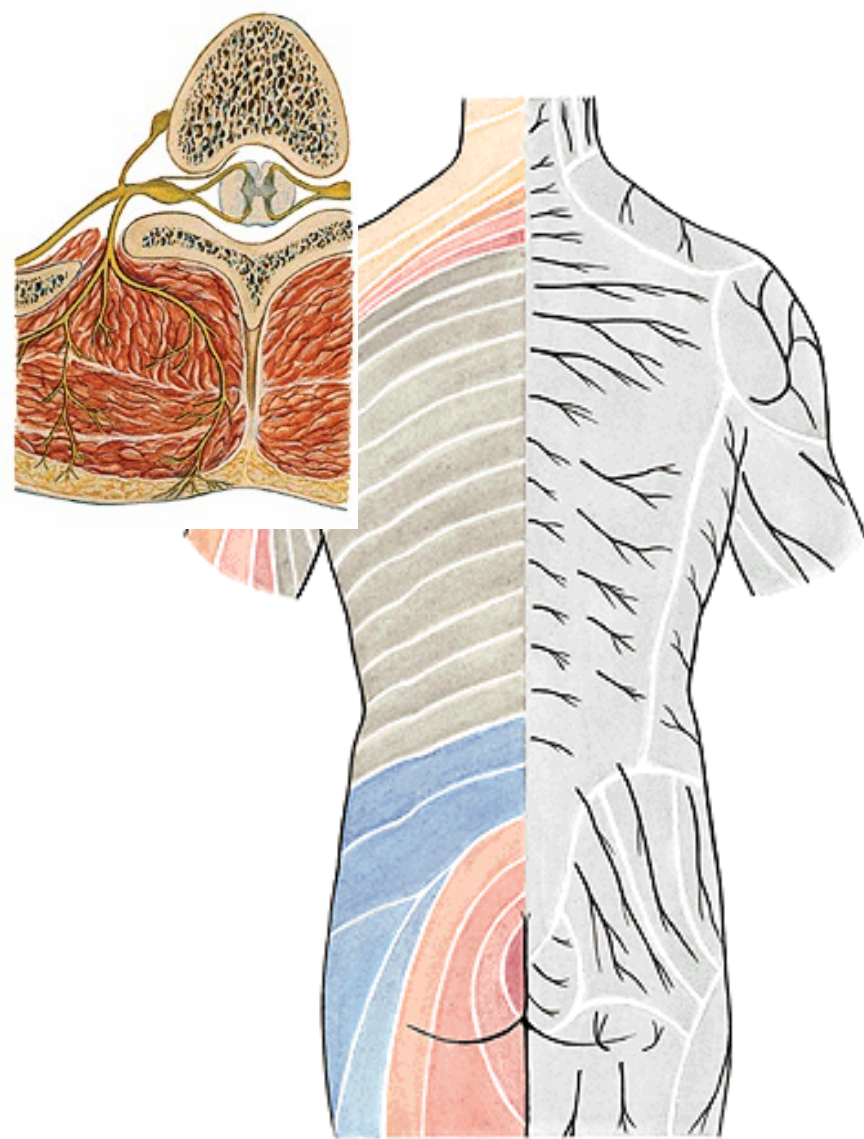
Medial + lateral branches

4. **Nn. clunium superiores (lumbar)**
5. **Nn. clunium medii (sacral)**

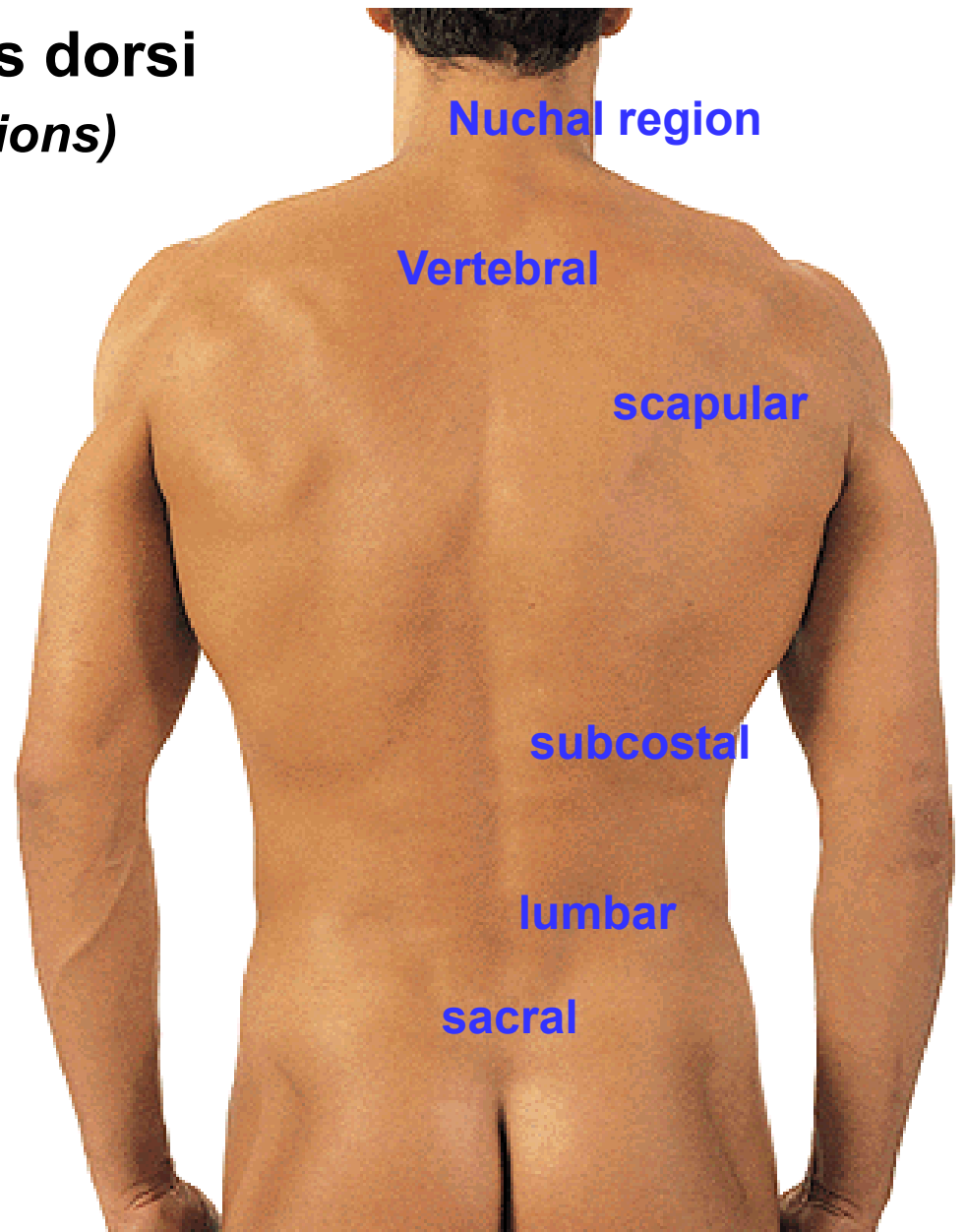
Subcutaneous layer – rr. dorsales

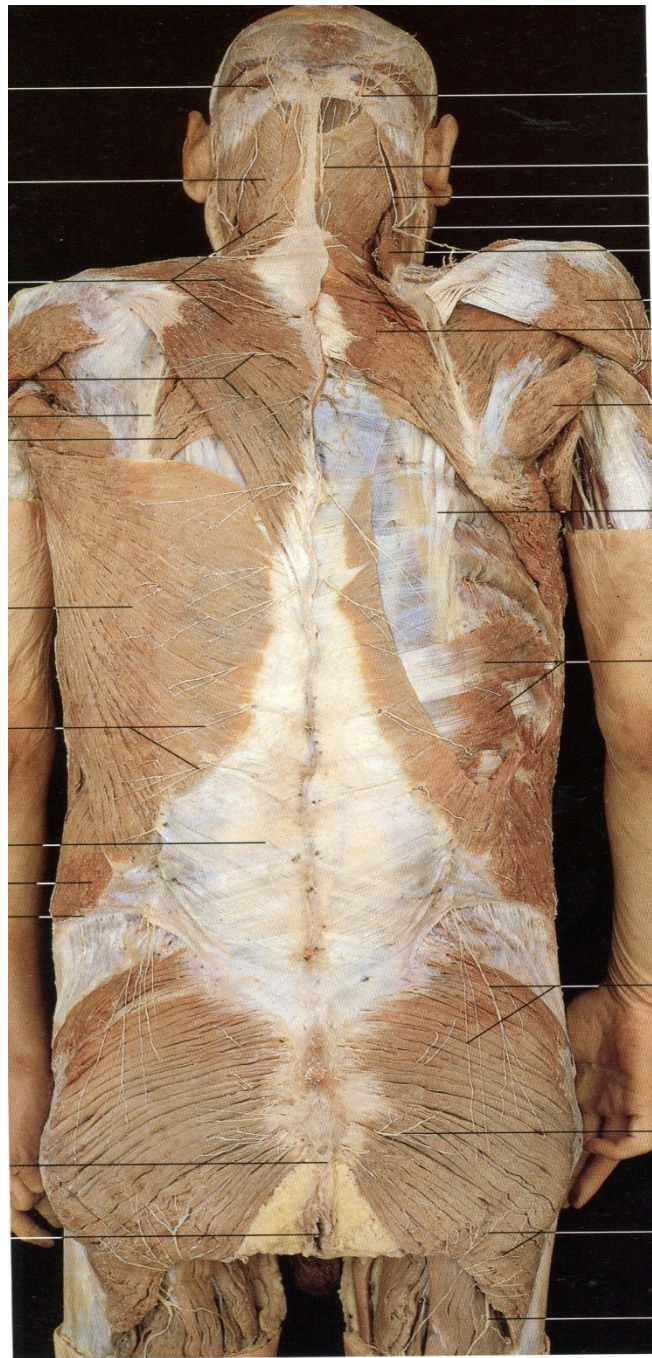
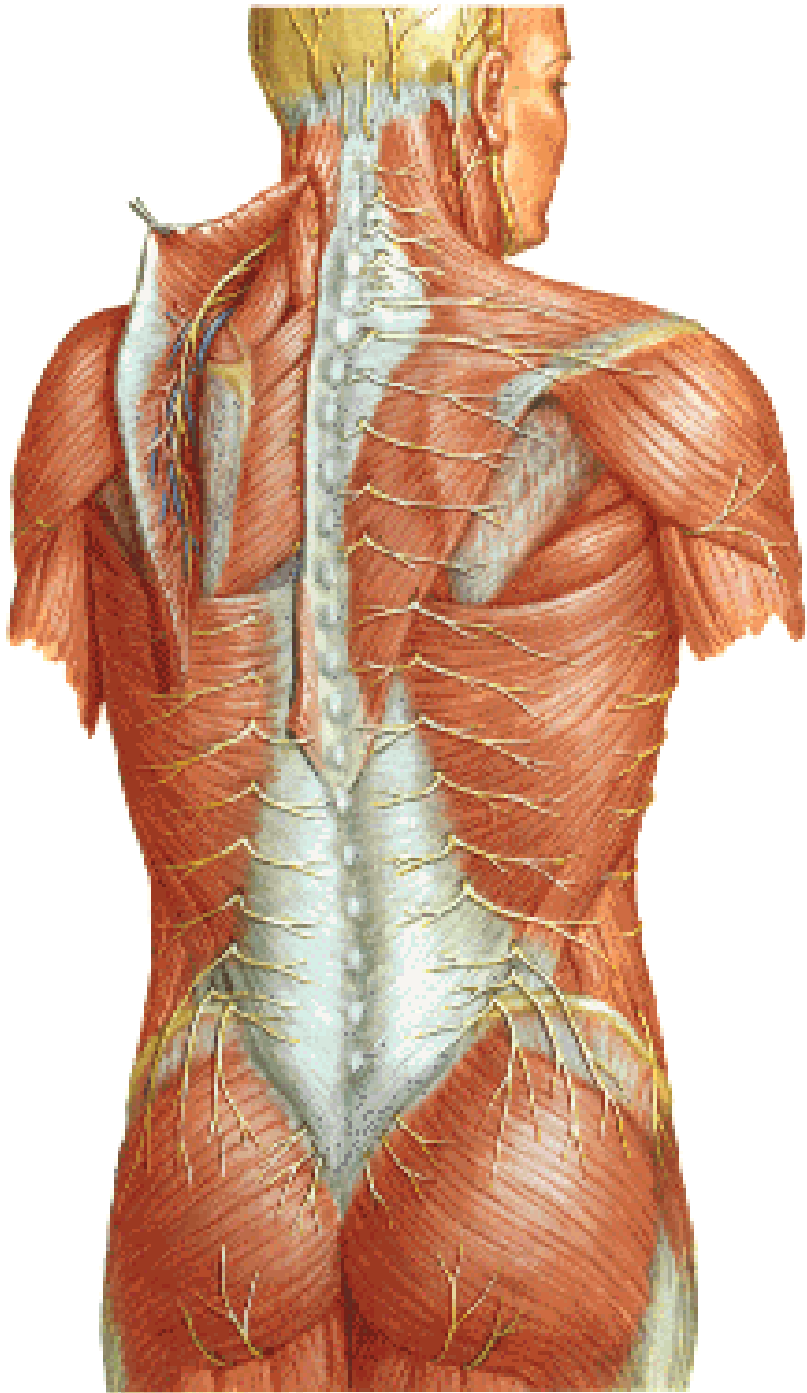
2) Rami ventrales (ventral branches)

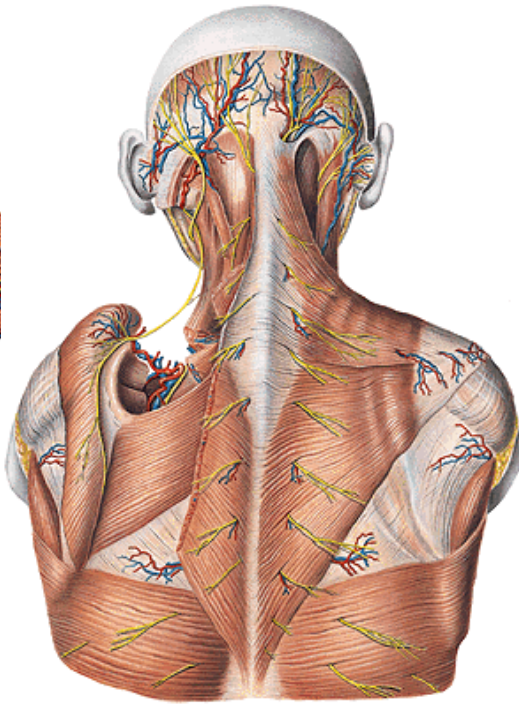
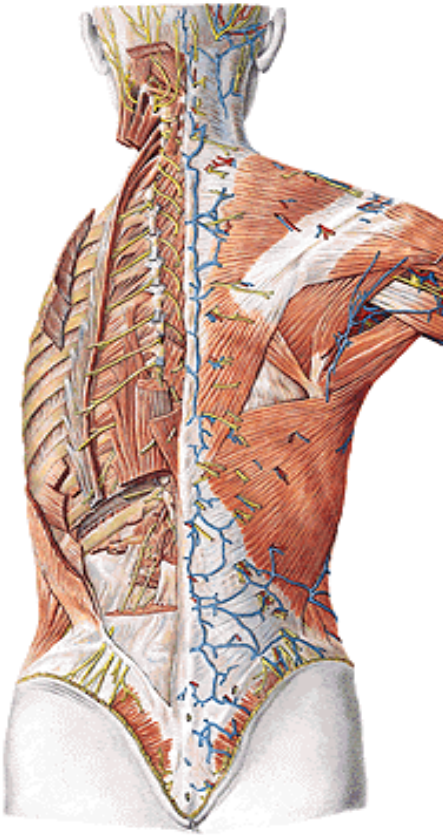
except of nn. intercostales form plexuses – plexus cervicalis, brachialis, lumbalis, sacralis



Regiones dorsi (back regions)



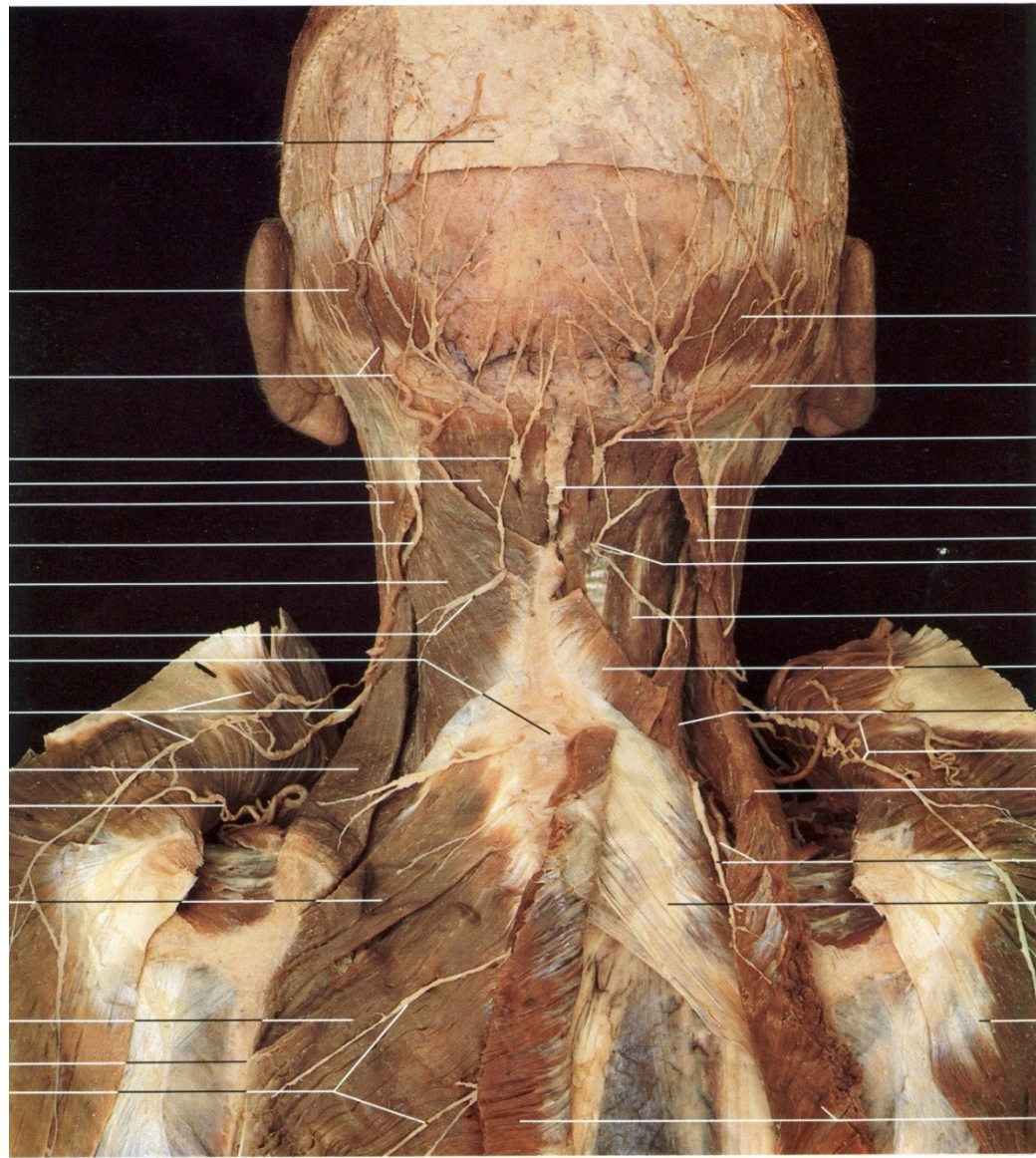
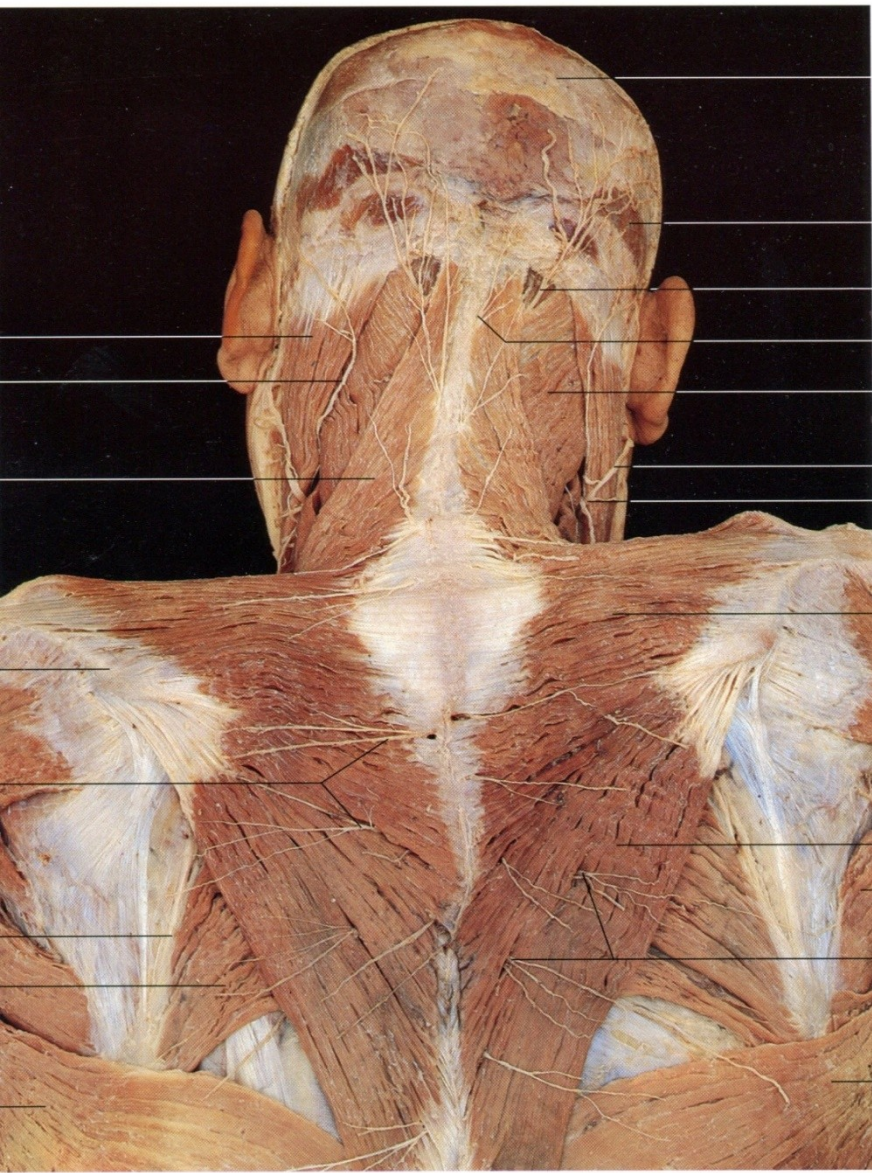




Nerves of the back

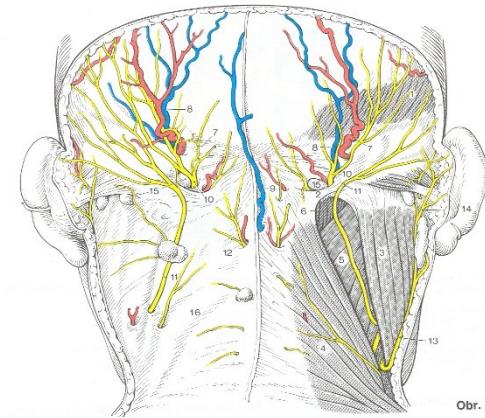
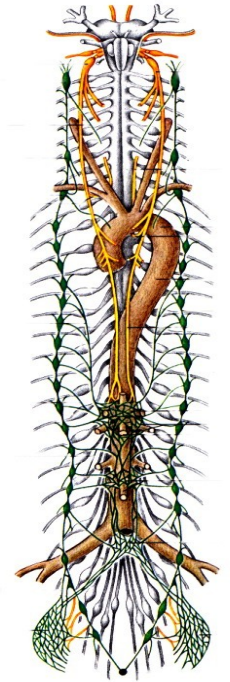
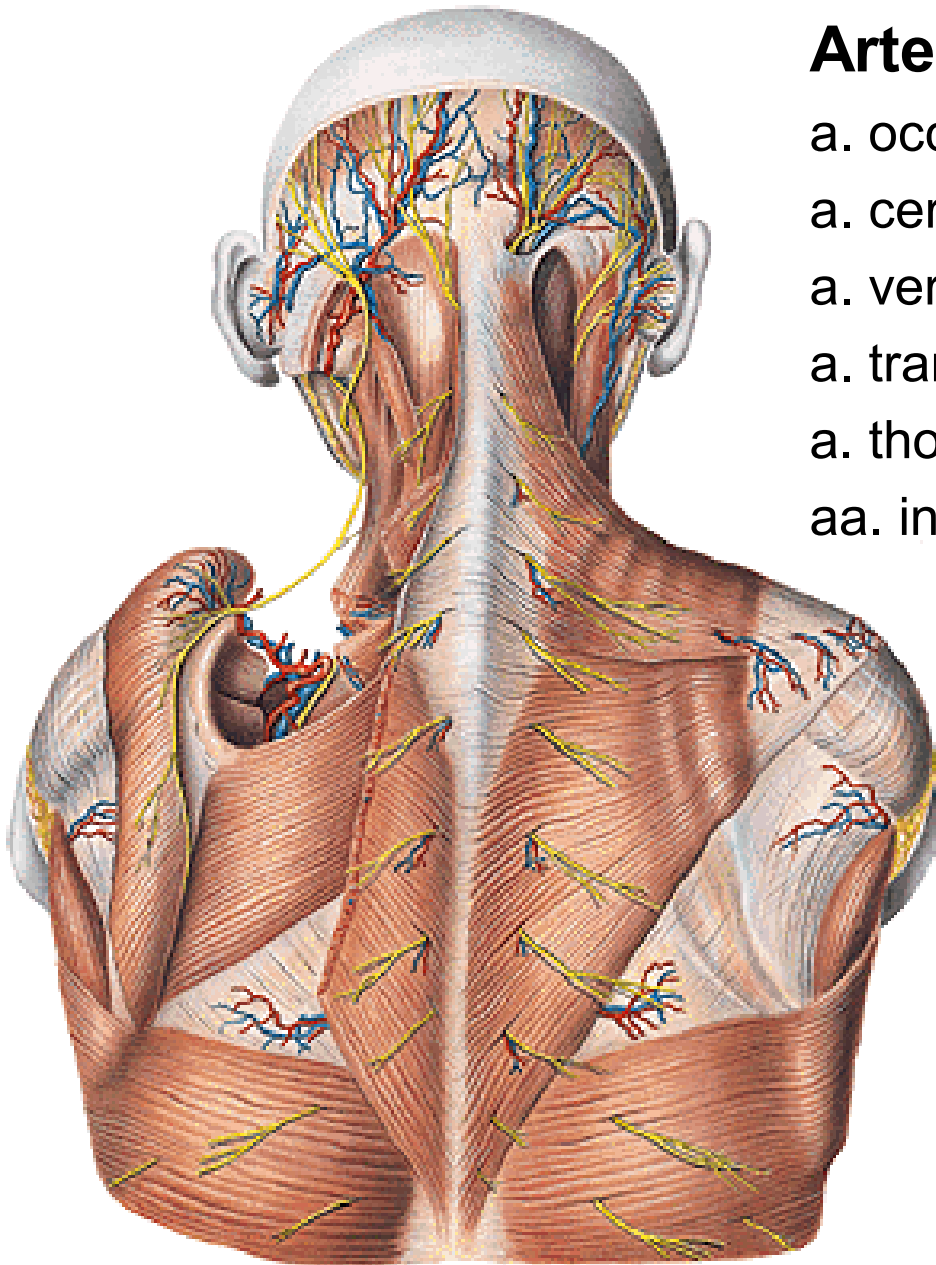
- N. accessorius XI. cranial nerve
- N. occipitalis minor (plexus cervicalis)
- N. thoracodorsalis (plexus brachialis)
- N. dorsalis scapulae (plexus brachialis)
- Nn. intercostales

+ rami dorsales nervorum spinalium (dorsal branches of spinal nerves)

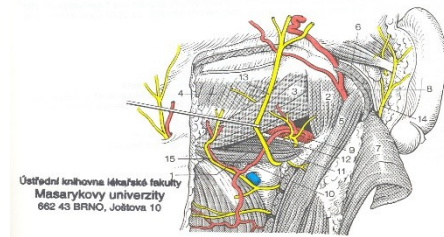


Arteries of the back

- a. occipitalis
- a. cervicalis profunda
- a. vertebralis
- a. transversa colli
- a. thoracodorsalis
- aa. intercostales



Obr. 14



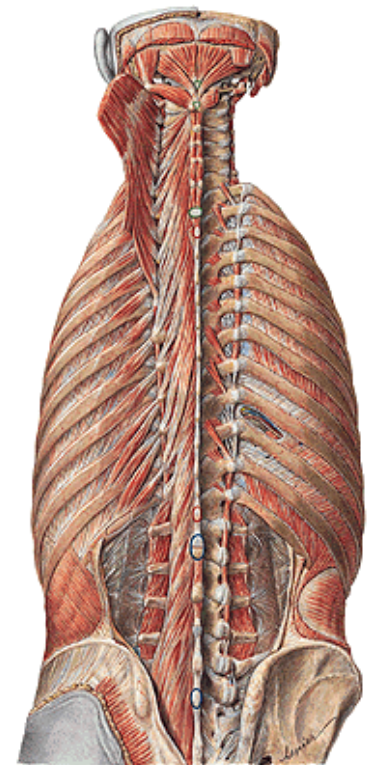
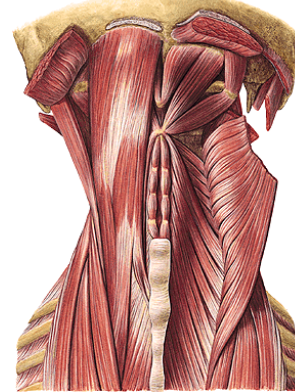
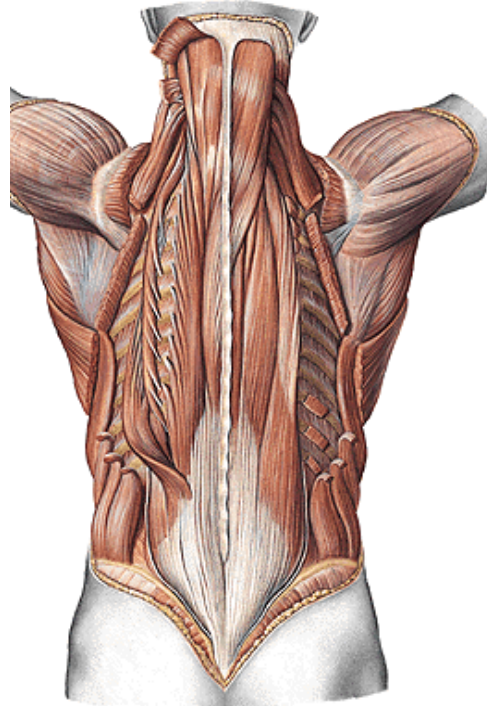
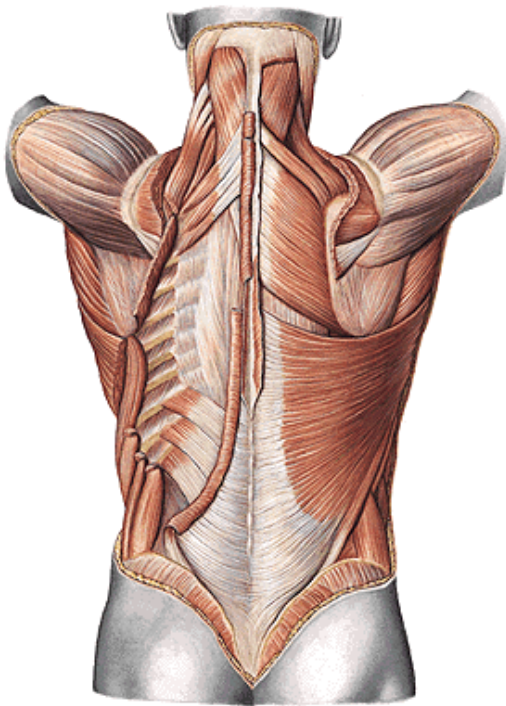
Ústřední knihovna Lékařské fakulty
Masarykovy univerzity
662 43 BRNO, Jeltšova 10

Obr. 15

Intrinsic muscles of the back

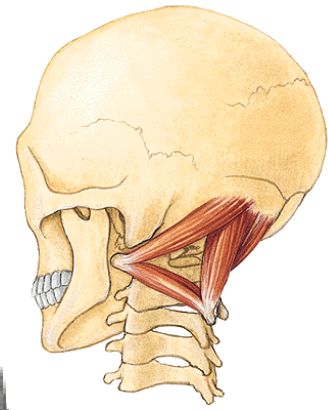
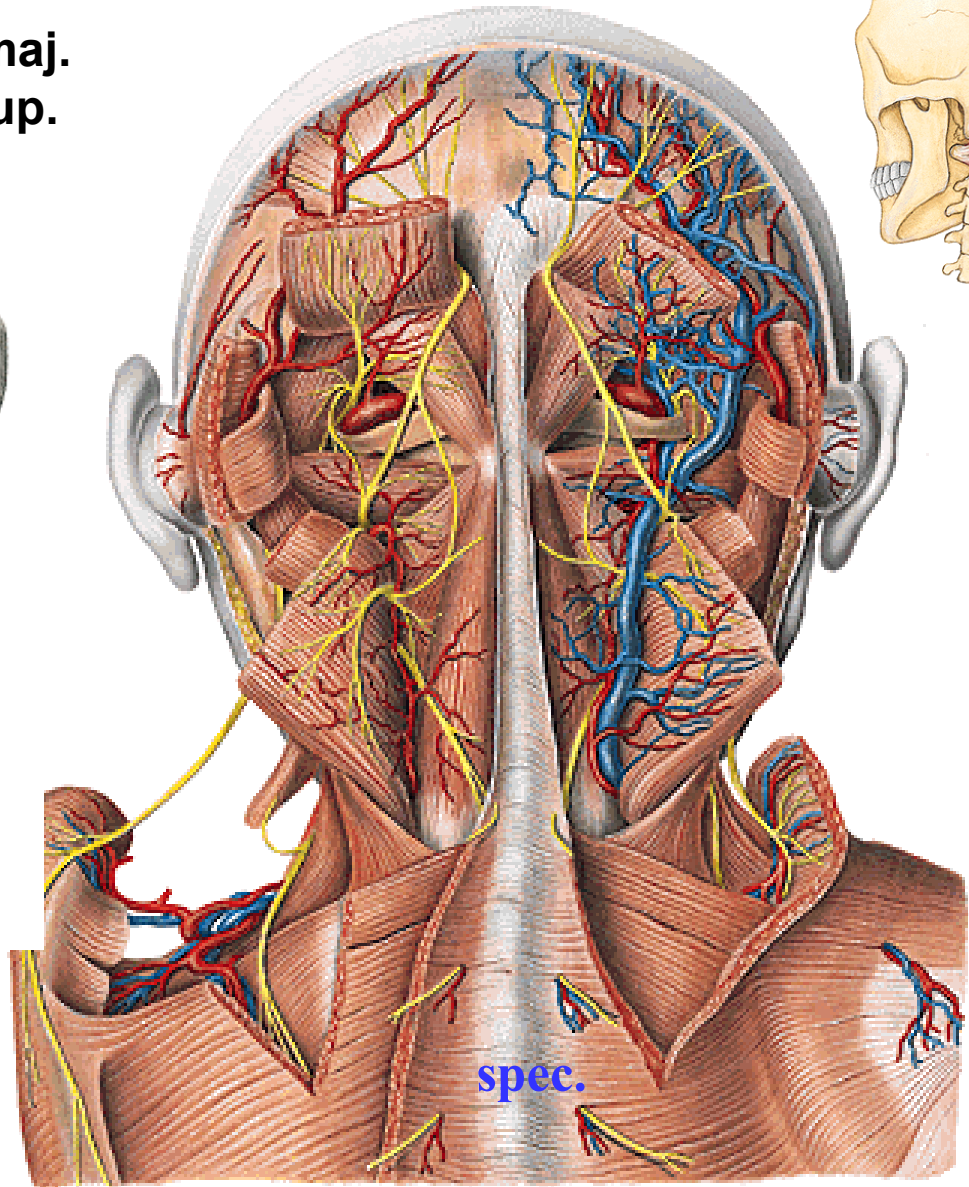
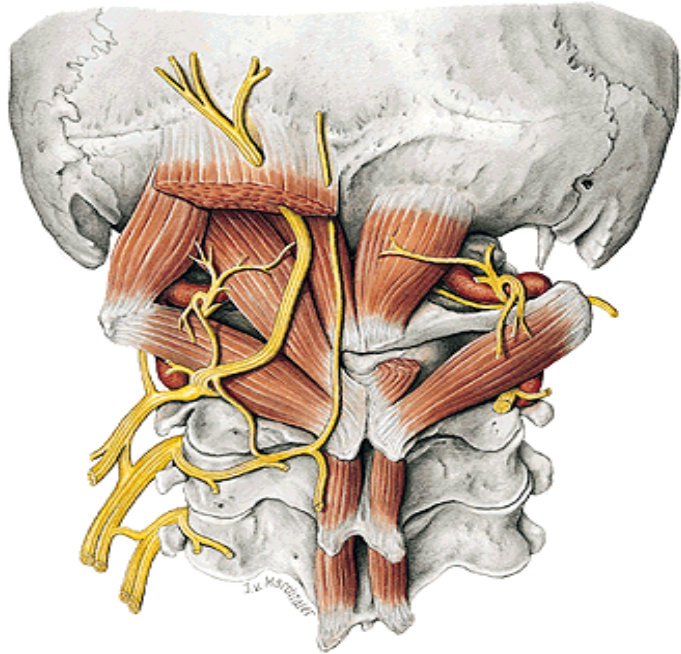
mainly extensors of the back and the head, innervation **rami dorsales of spinal nerves**

- 1) **Spinotransversal system** (m. splenius capitis and cervicis)
- 2) **Sacrospinal system** (m. erector spinae, longissimus and iliocostalis)
- 3) **Spinospinal system**
- 4) **Transversospinal system** (m. semispinalis capitis and cervicis)

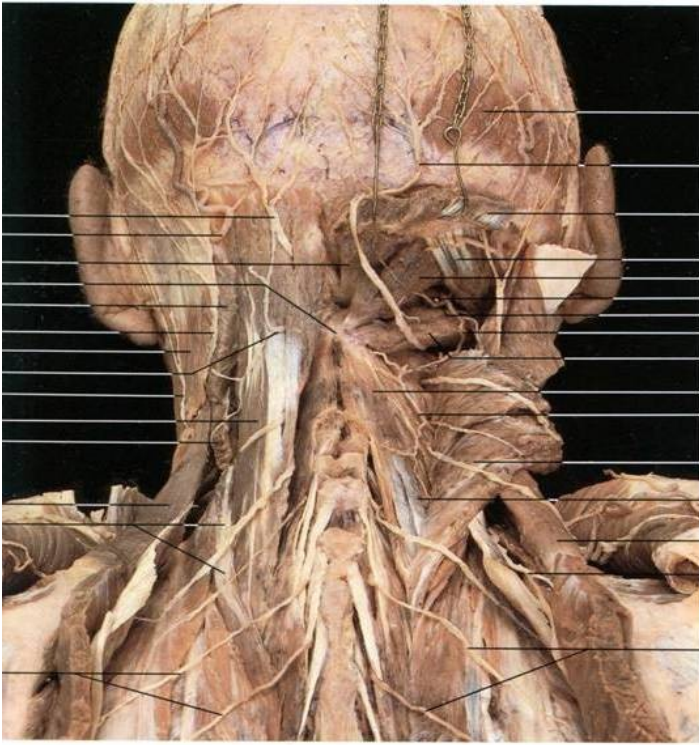


Short back muscles

m. rectus capitis post. min.+maj.
m. obliquus capitis inf. and sup.



spec.



Regio nuchae IV (hlbková vrstva). M. semispinalis vpravo je pretatý a odklopený

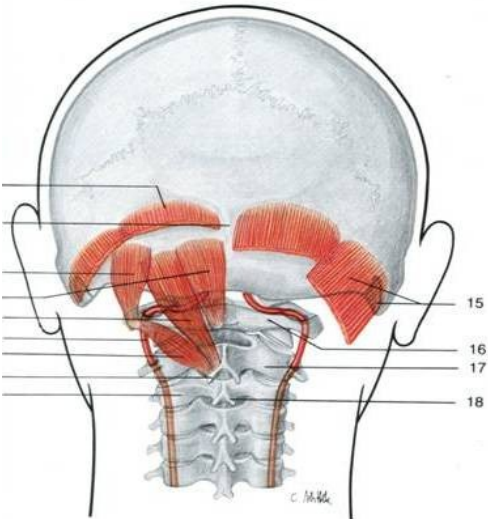
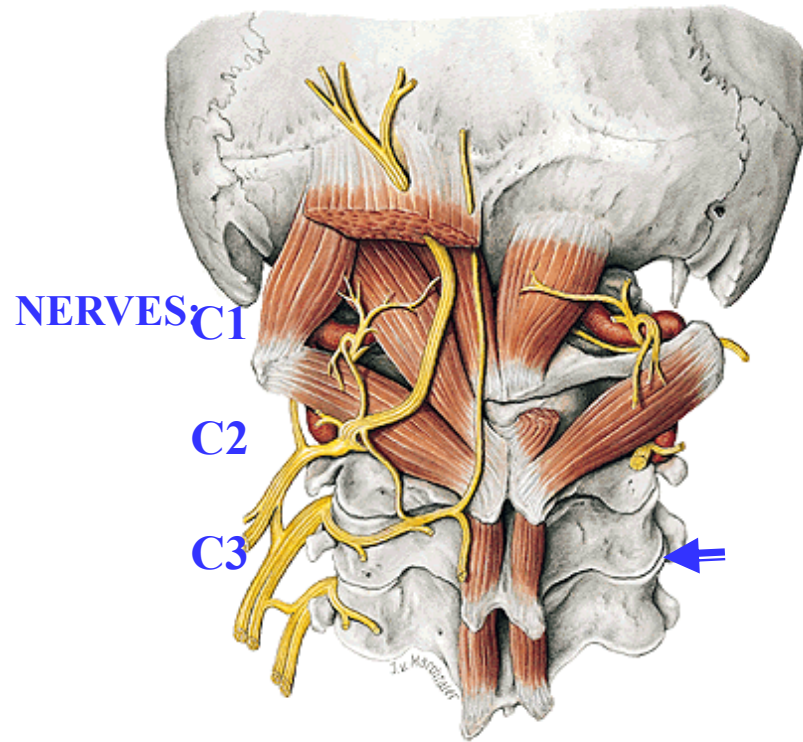
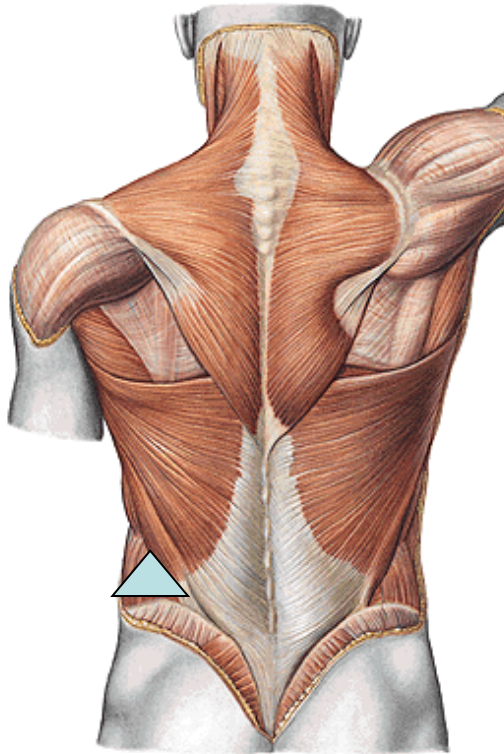


Schéma trigonum subocci

Trigonum suboccipitale - content:
n. suboccipitalis – C1
a. cervicalis profunda
a. vertebralis
arcus posterior of atlas

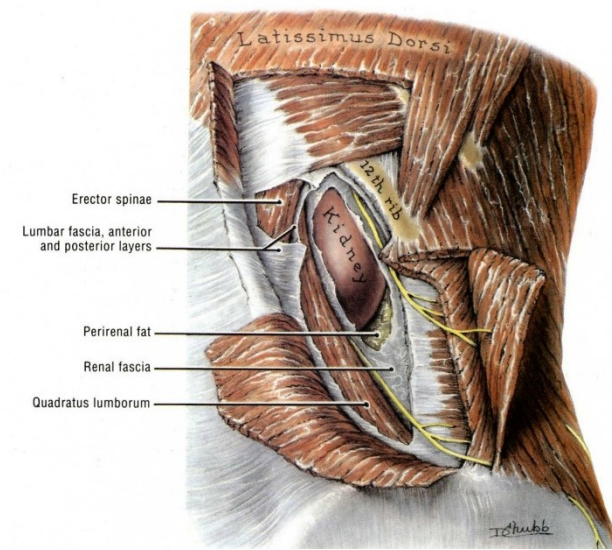
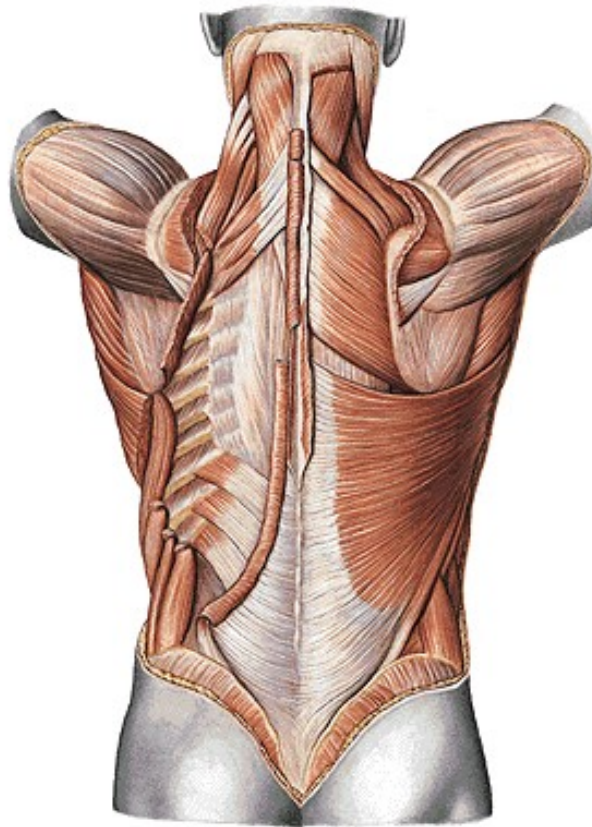


Trigonum and mm. nuchae profundi



Trigonum lumbale Petiti:

**m. latissimus dorsi, crista iliaca,
m. obliquus externus abdominis,
m. obliquus internus abdominis - bottom**



Trigonum Grynfelti:

**m. serratus post. inf.
m. obliquus internus abdominis
m. erector spinae**

Tetragon Krausei:

+ costa XII

hernias

access to the kidney

perirenal abscesses

Used pictures come from:

Moore, K. L. (1992): Clinical oriented anatomy. Third edition.
Williams&Wilkins, A Waverly Company.

Gilroy, A. M. et all. (2009): Atlas of Anatomy. Thieme New York, Stuttgart.

Putz, R. (2008):
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Platzer, W., Kahle, W., Leonhardt H. (1992):
**Locomotor system. Georg Thieme Verlag, Stuttgart,
New York, 4th edition.**

Čihák, R. (1987): Anatomie 1. Avicenum, Zdravotnické nakladatelství.