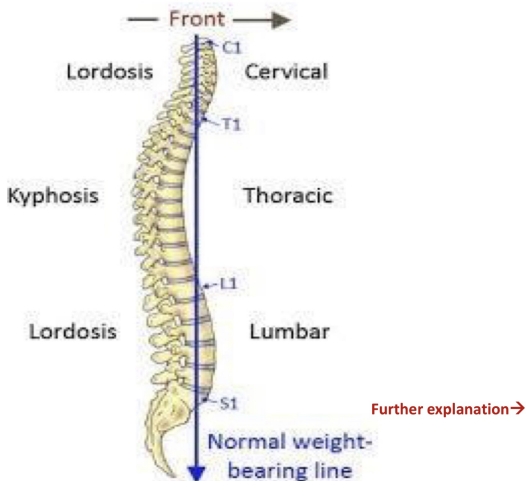


Muscles of the back



① scoliosis: lat. deviation of the spine.

pain → ↓ gravity muscles.

② Ankylosing spondylitis

- hyperkyphosis
- back pain.



⊗ Types of vertebra

Typical

- body + arch

- Typical vertebrae have a body and an arch, and the body is larger than the arch because 80% of the weight is carried by the body.
- At the same time, the size of the body increases as we go down, for example the bodies of the cervical vertebrae are smaller than the bodies of the thoracic, this makes sense because the cervical vertebrae are holding the head, while the thoracic vertebrae are holding the head and the upper limbs, the lumbar vertebrae are holding the head, the upper limbs and the trunk and so on.
- The arch posteriorly is composed of:
 - two pedicles which connect the body to the arch.
 - 2 laminae
 - spinous process
 - transverse process
 - facet joint (inferior and superior)

Atypical

add. struct.

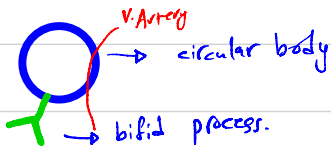
- 2 cervical [odontoid]

fused

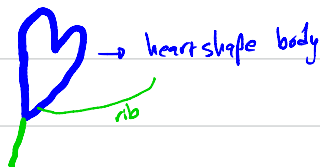
- [sacrum]

No pedicle, No lamina

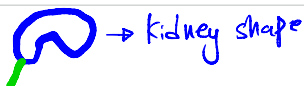
1. cervical



2. Thoracic



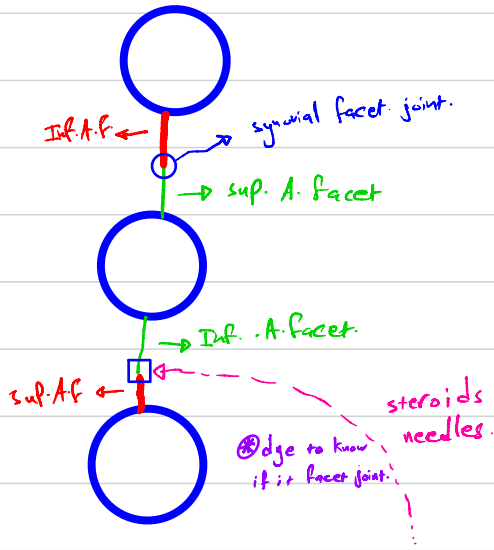
3. lumbar



- [coccyx] fused. body only.

- C1 [No body] 2 arches.

⊗ Articulation.



⊗ stability of the joint

1. shape of the bone.
2. ligaments.
3. muscles [eg: back]

Muscles of spine | مَوَاطِنُ السَّيْنِ

→ **superf. Muscles** [Trapez., latissimus dorsi, levator scapulae]
 shoulder girdle.

→ **Intermediate** [serratus post. sup. / serratus post. inf.]
 respiration

→ **deep** [Main] **just know that there are multiple layers, and that they could work between vertebrae, on segments or on the whole vertebral column.**

→ extension, Med. lat. flexion.

→ fatigue resist.

Done by Ayham Alhmaid