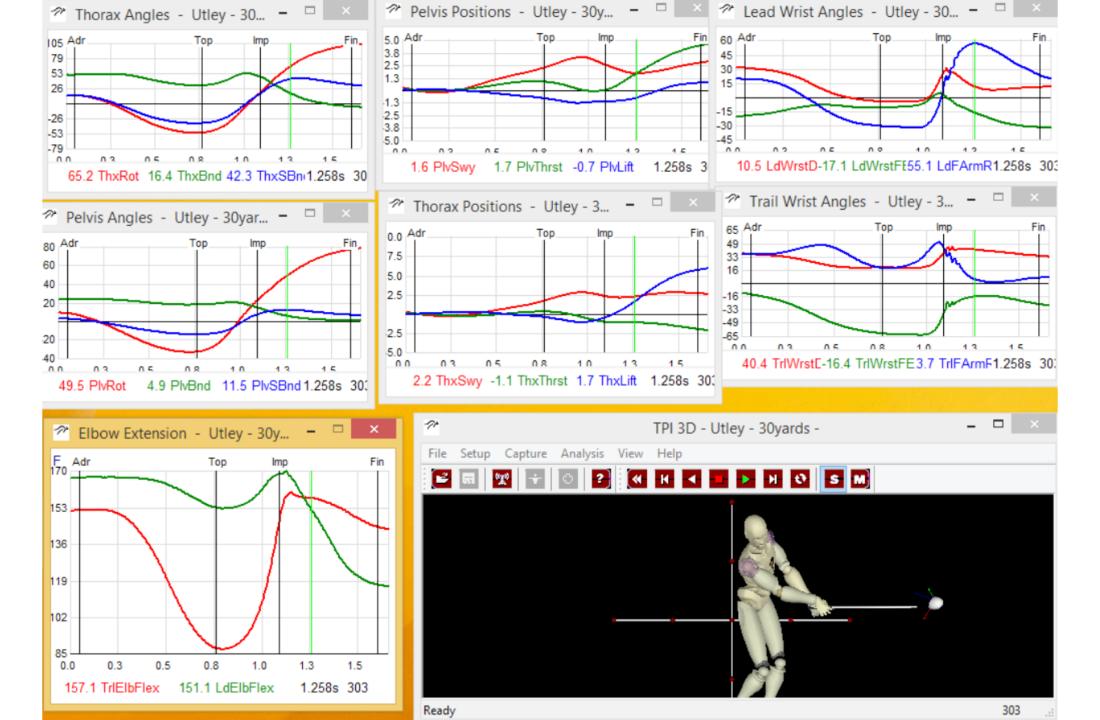
Topics

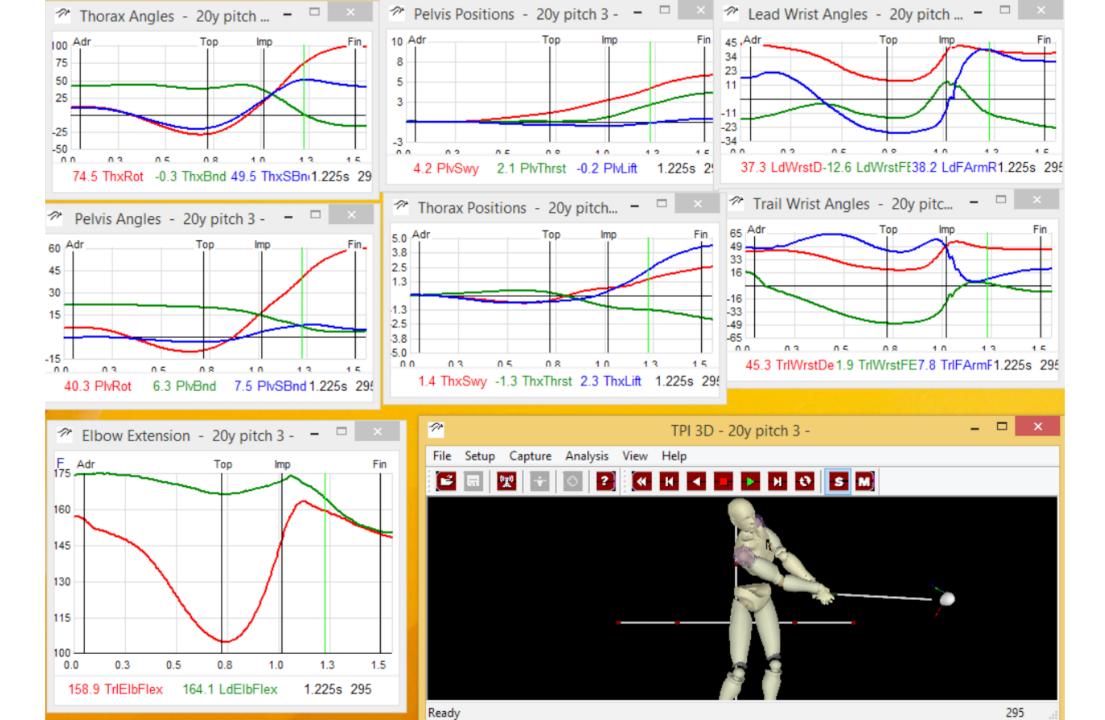
• 3D – Short Game – Stand up and Unhinge

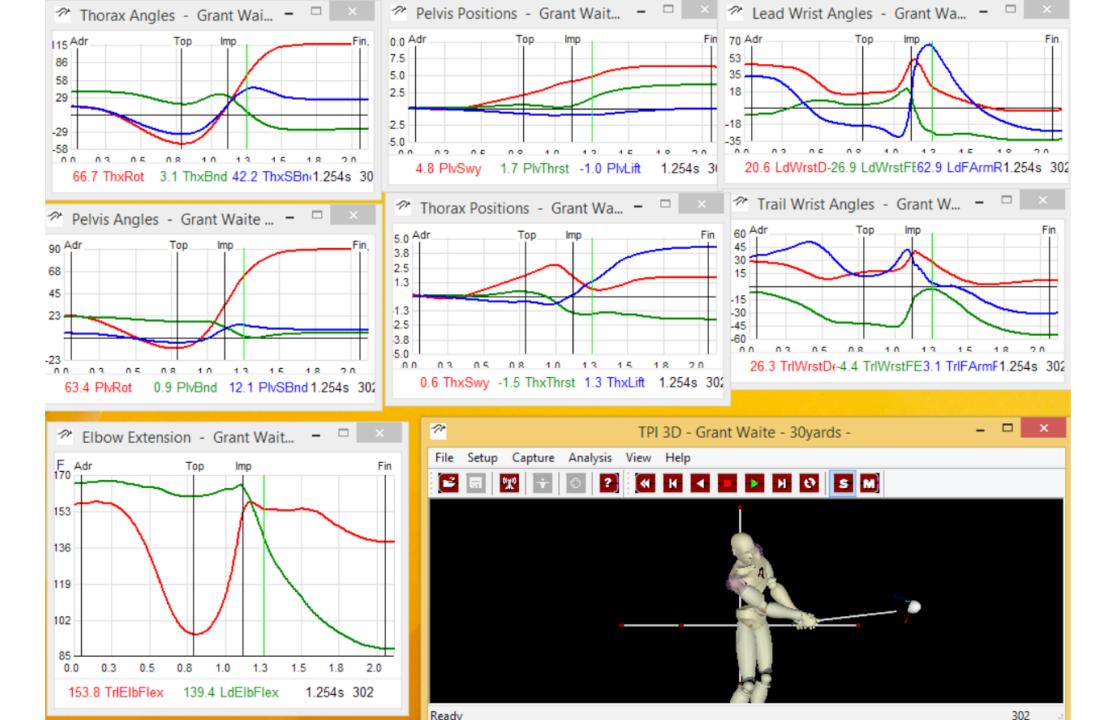
Anatomy – Thoracic Spine and Ribs

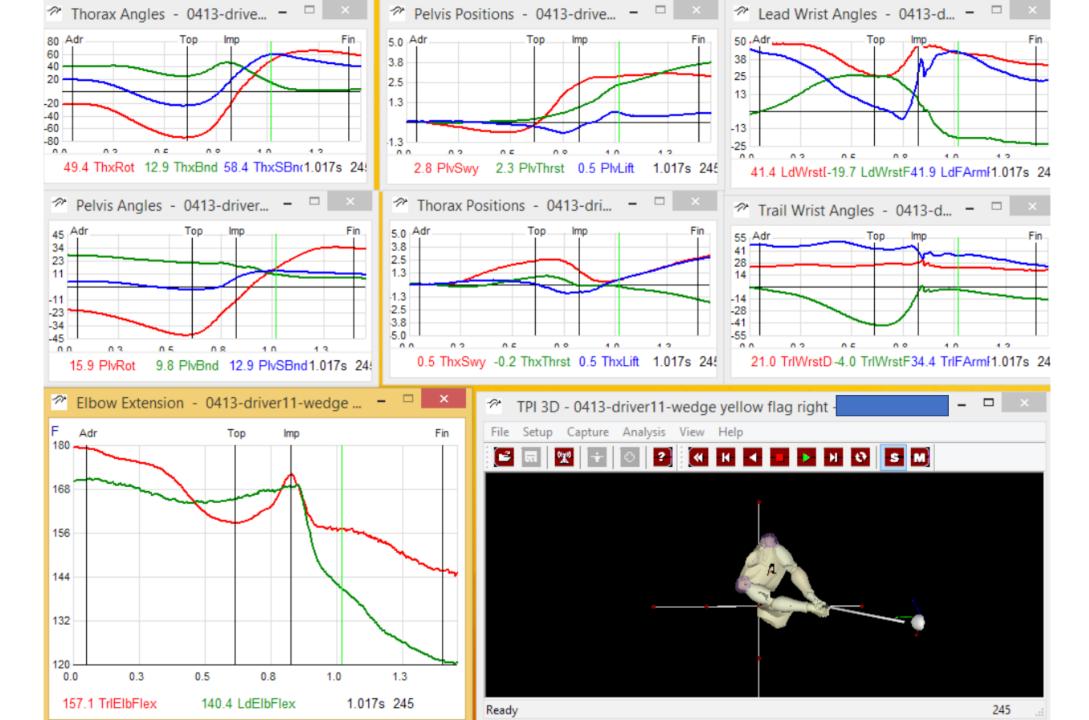
Coaches Questions/Swing Discussions

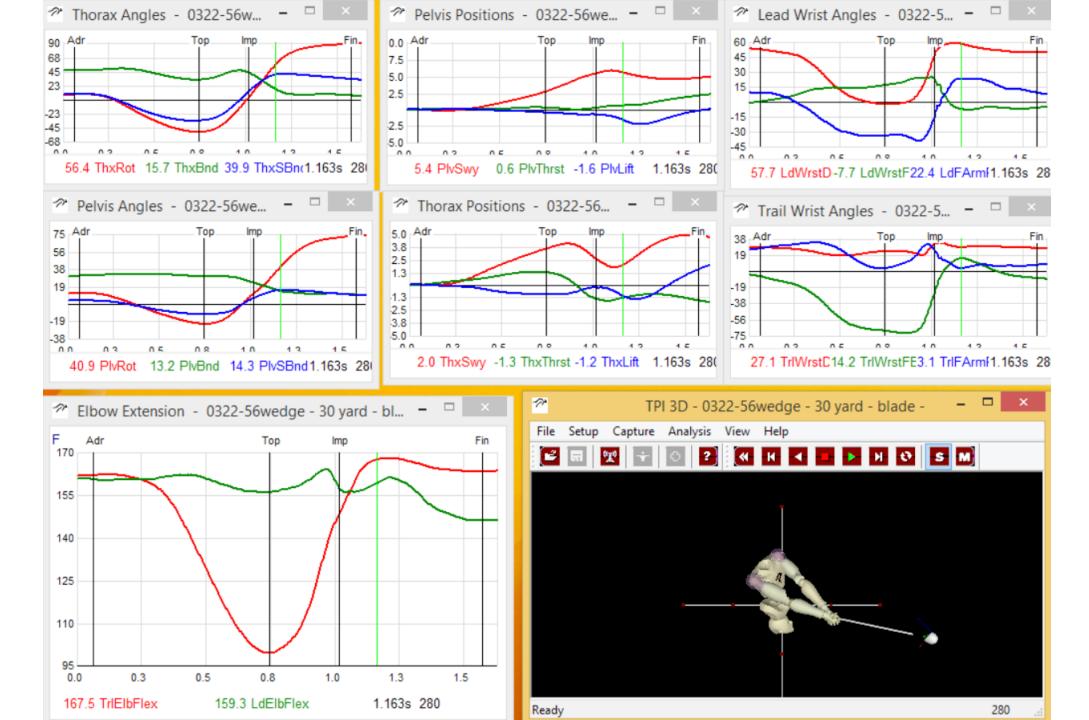


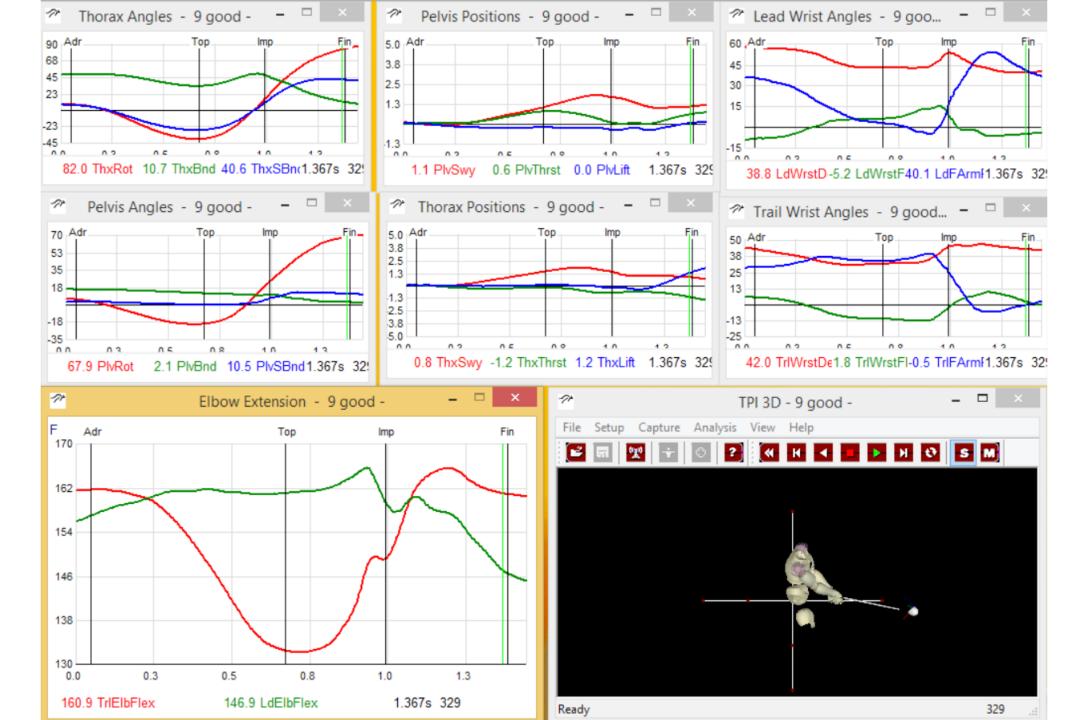


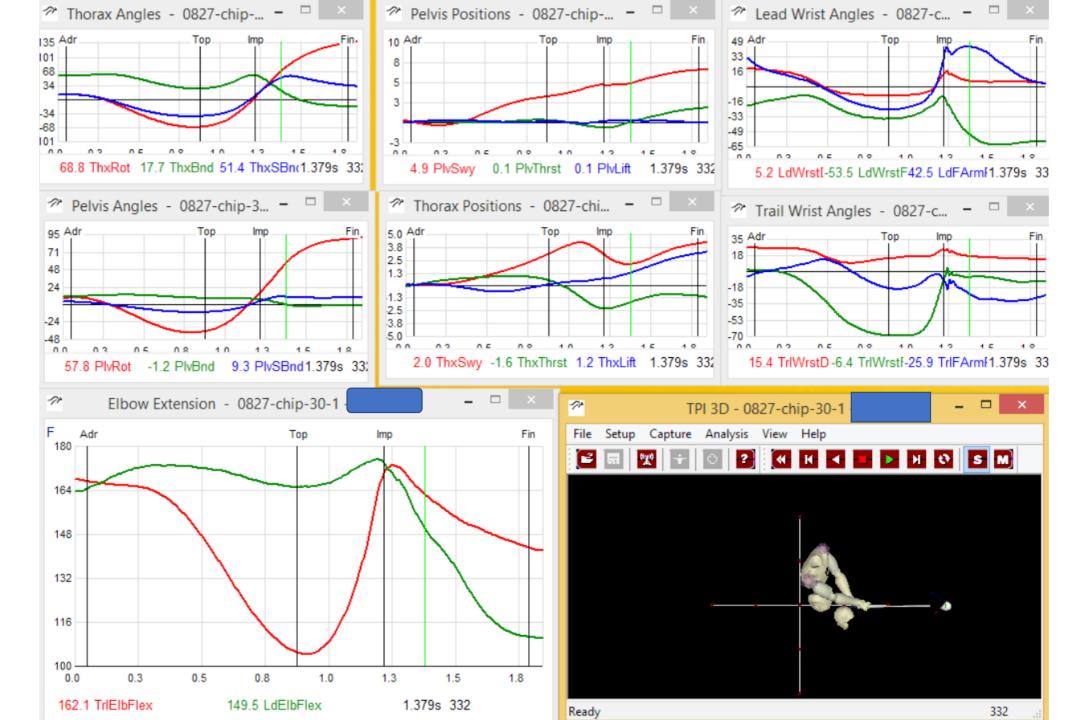












Vertebral Column · Reflexology Chart

Cervical spine

	C 1	Atlas	Head - Brain - Inner and Middle Ears
	C 2	Axis	Auditory Nerves - Sinuses - Eyes - Tongu
-	C 3	Cervical vertebrae	Teeth - Cheeks - Outer Ears
	C 4	Cervical vertebrae	Nose - Mouth - Lips - Eustachian Tubes
	C 5	Cervical vertebrae	Pharynx - Vocal Cords
	C 6	Cervical vertebrae	Shoulders - Neck - Tonsils
	C 7	Cervical vertebrae	Thyroids - Elbows

Thoracic spine

Th 1	 Thoracic vertebrae 	Trachea - Esophagus - Lower Arms - Fingers
Th 2	2. Thoracic vertebrae	Heart
Th 3	3. Thoracic vertebrae	Lungs - Chest - Breast
Th 4	4. Thoracic vertebrae	Gall Bladders
Th 5	5. Thoracic vertebrae	Liver - Blood Circulation - Solar Plexus
Th 6	6. Thoracic vertebrae	Stomach
Th 7	7. Thoracic vertebrae	Pancreas - Duodenum
Th 8	8. Thoracic vertebrae	Spleen
Th 9	9. Thoracic vertebrae	Adrenal Glands
Th 10	10. Thoracic vertebrae	Kidneys
Th 11	11. Thoracic vertebrae	Ureters
Th 12	12. Thoracic vertebrae	Small Intestines - Lymph Circulation

Lumbar spine

S 2

\	L1	 Lumbar vertebrae 	Large Intestines - Inguinal Region
\	L 2	2. Lumbar vertebrae	Abdomen - Appendix - Upper Legs
\	L 3	3. Lumbar vertebrae	Bladder - Sex Organs - Knees
\	L 4	4. Lumbar vertebrae	Sciatic Nerves - Prostate Gland
\	L 5	5. Lumbar vertebrae	Lower Legs - Feet

S 1 Sacrum Hip Bones - Buttocks

Coccyx Rectum - Anus

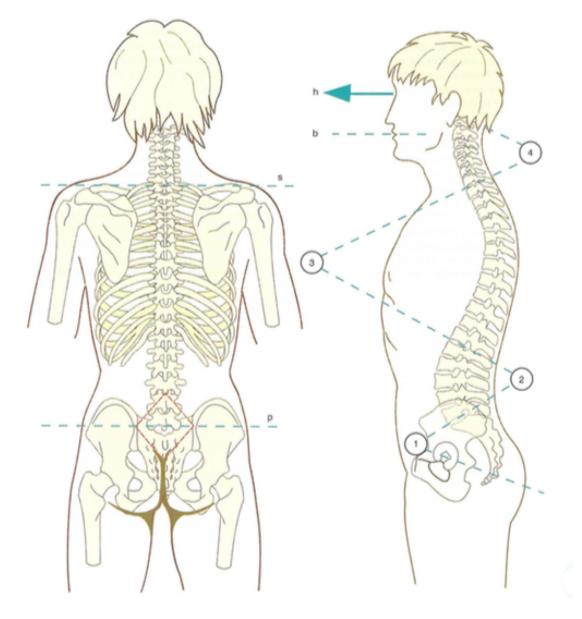
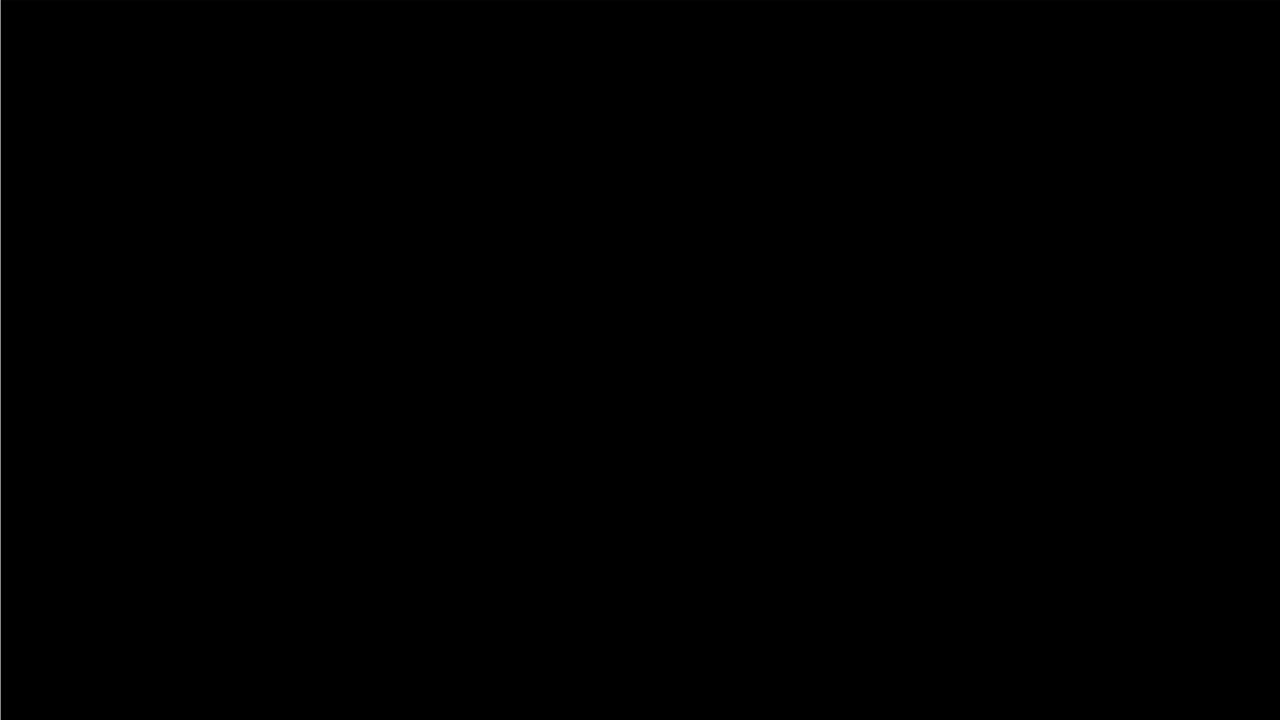
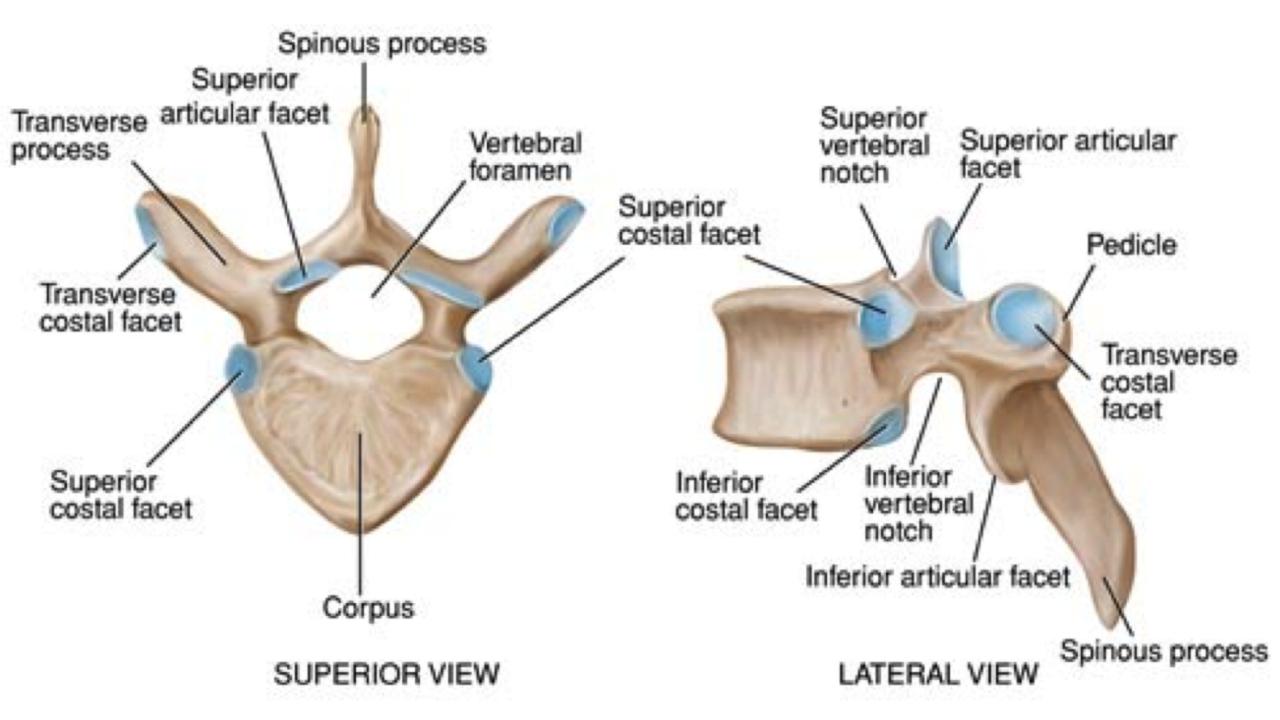


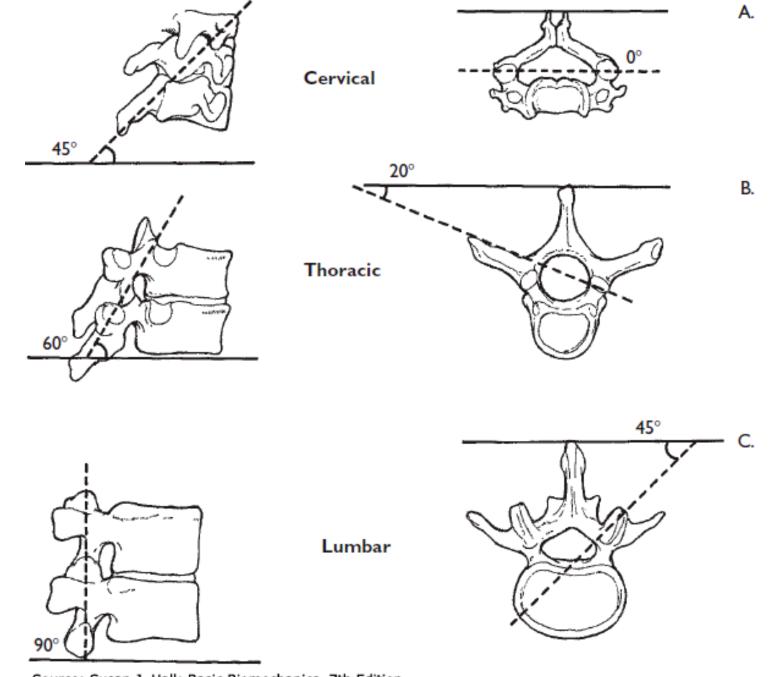
Figure 5 Figure 6

The three principles [edit]

- 1. Principle I: When the spine is in neutral, sidebending to one side will be accompanied by horizontal rotation to the opposite side.^[2] This law is observed in type I somatic dysfunction, where more than one vertebrae are out of alignment and cannot be returned to neutral by flexion or extension of the vertebrae. The involved group of vertebrae demonstrates a coupled relationship between sidebending and rotation. When the spine is neutral, side bending forces are applied to a group of typical vertebrae and the entire group will rotate toward the opposite side: the side of produced convexity^[3] Extreme type I dysfunction is similar to scoliosis.
- Principle II: When the spine is in a flexed or extended position (non-neutral), sidebending to one side will be accompanied
 by rotation to the same side. This law is observed in type II somatic dysfunction, where only one vertbral segment is
 restricted in motion and becomes much worse on flexion or extension. There will be rotation and sidebending in the same
 direction when this dysfunction is present.^[4]
- 3. **Principle III**: When motion is introduced in one plane it will modify (reduce) motion in the other two planes.^[4] The third principle sums up the other two laws by stating dysfunction in one plane will negatively affect all other planes of motion.





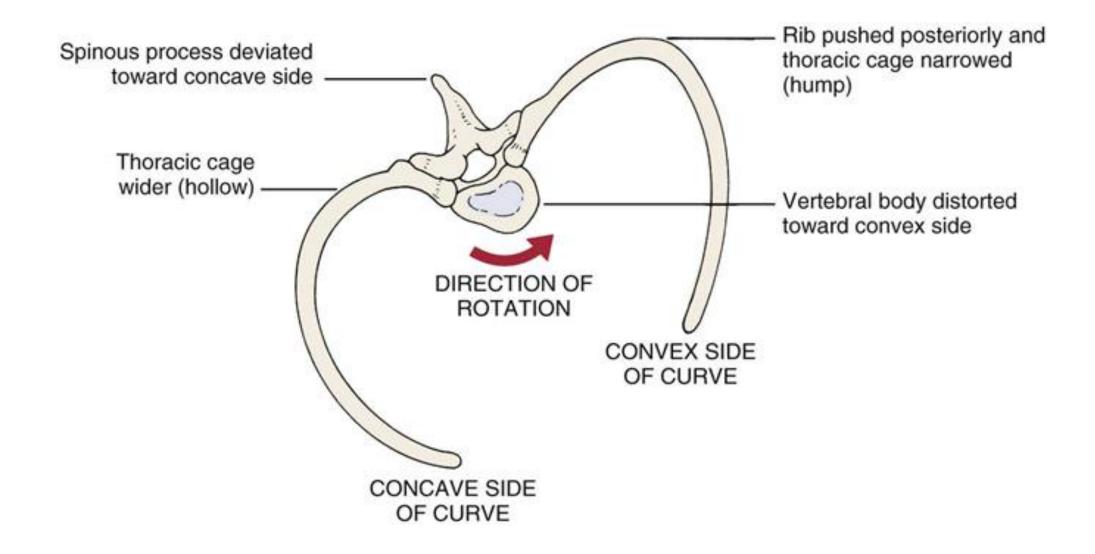


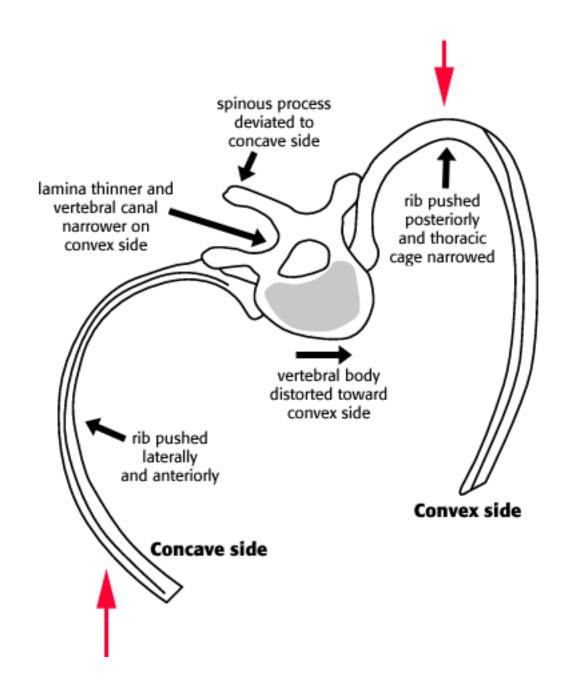
Source: Susan J. Hall: Basic Biomechanics, 7th Edition www.accessphysiotherapy.com
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Table 1.0 Normal ranges of movement in the vertebral column and hips

	Cervical (°)	Thoracic (°)	Lumbar (°)	Hips (°)
				(excluding ab
				and
				adduction)
Flexion	0-60	0-50	0-60	0-110
Extension	0-75	0-45	0-25	0-30
Lateral Flexion	0-45	0-40	0-25	n/a
Rotation	0-80	0-30	0-18	Internal = 0-40
				External =
				0-50

Adapted from ACSM (2006) and Magee (2006).





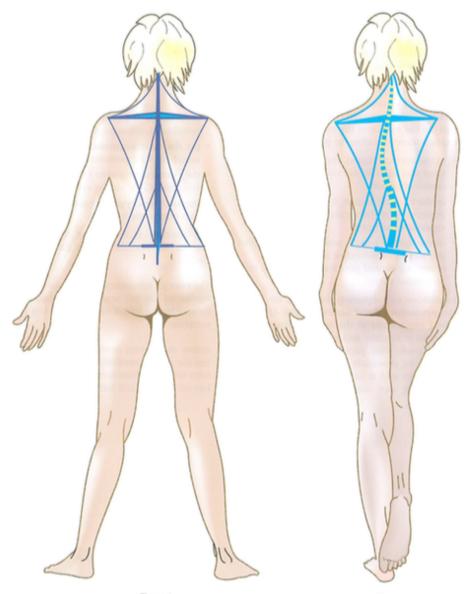
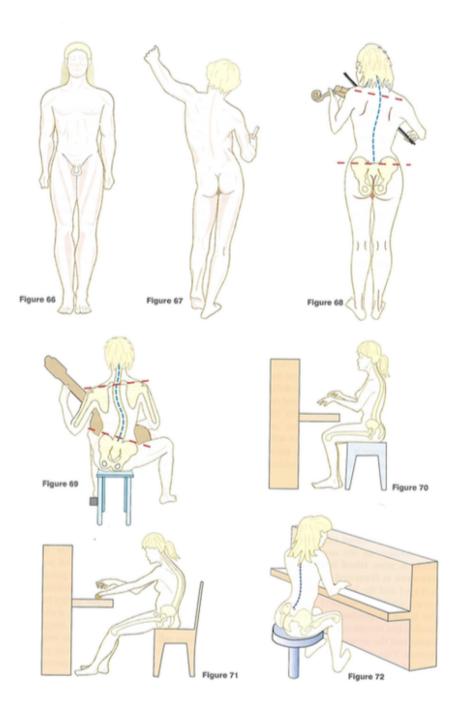
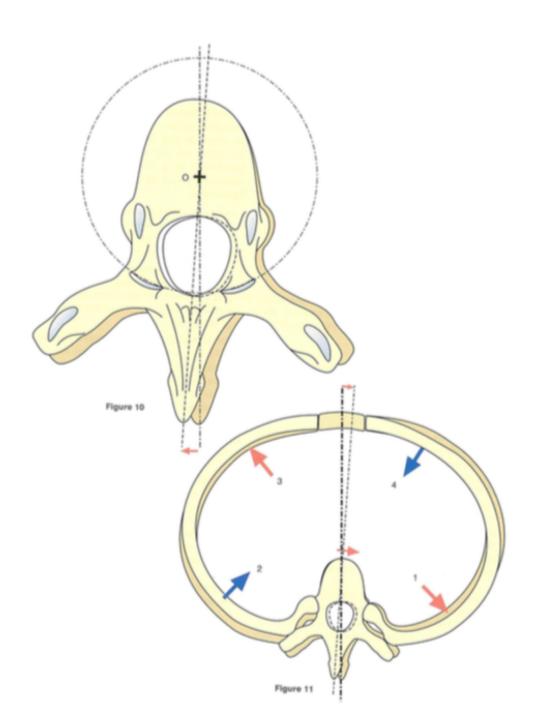


Figure 1

Figure 2





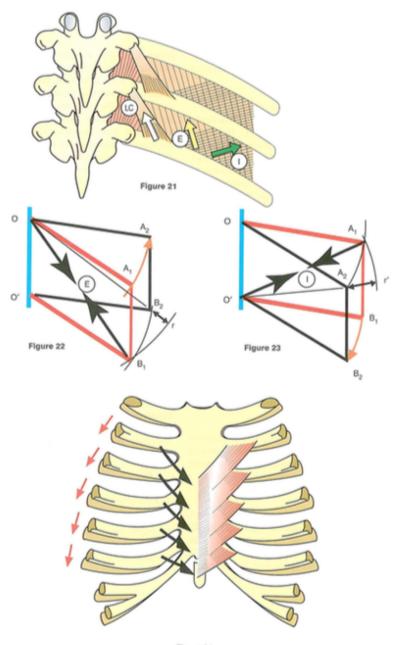
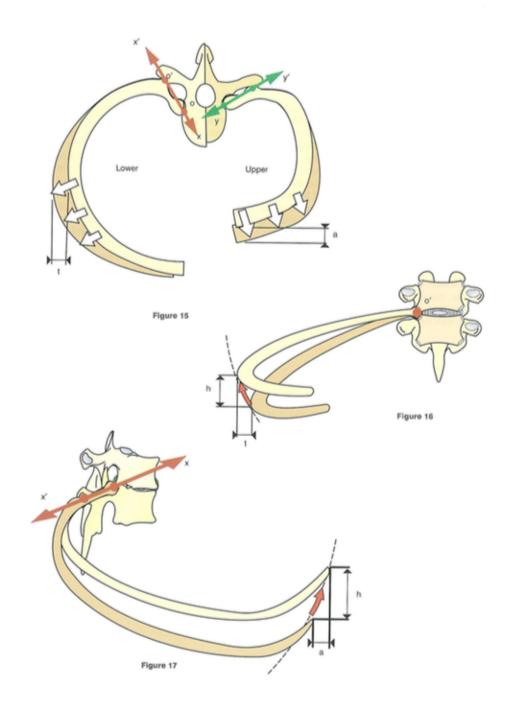
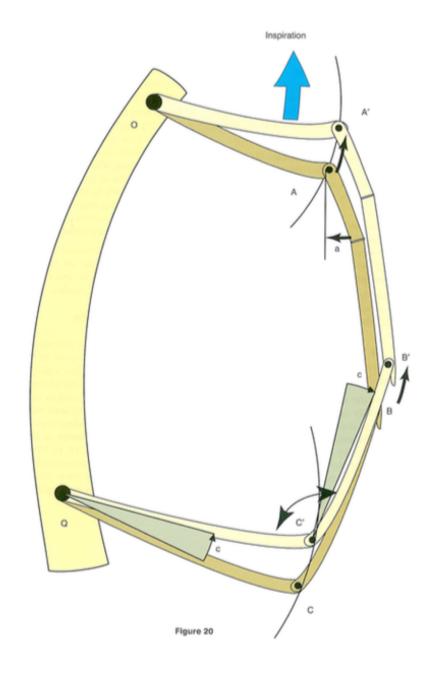
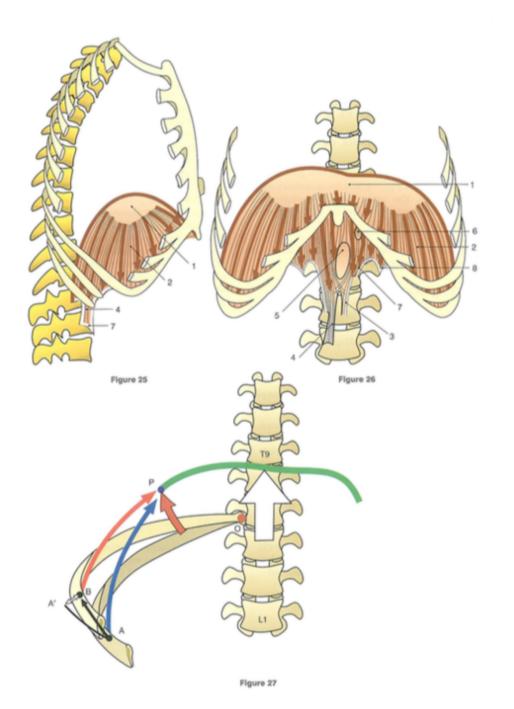


Figure 24







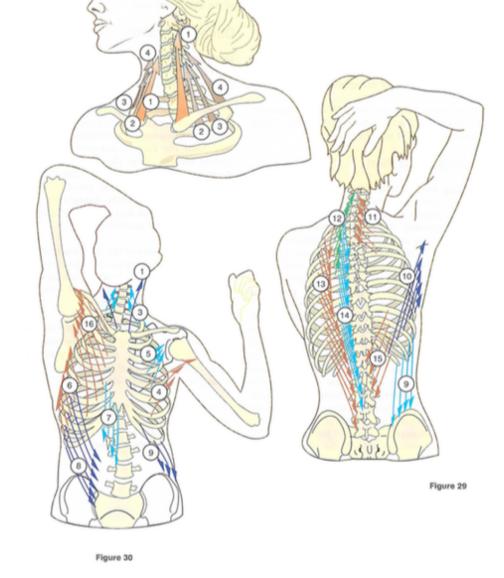
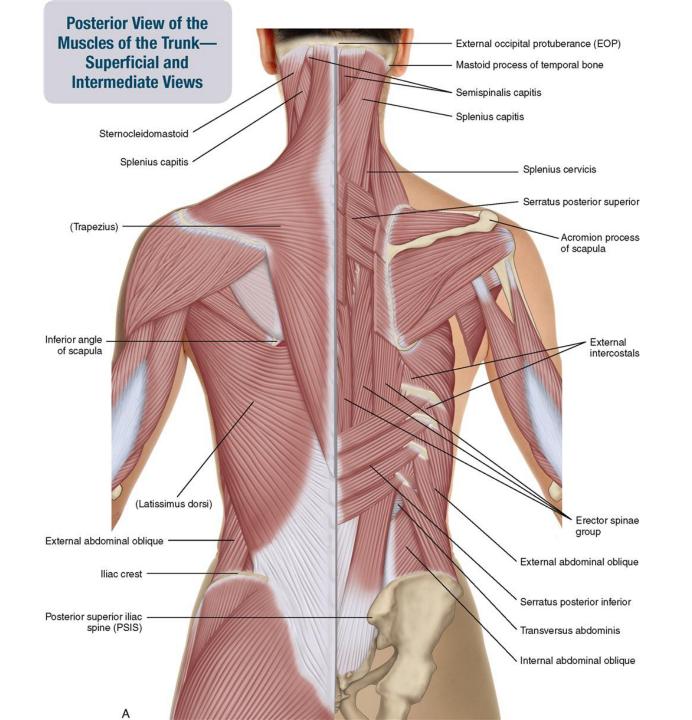
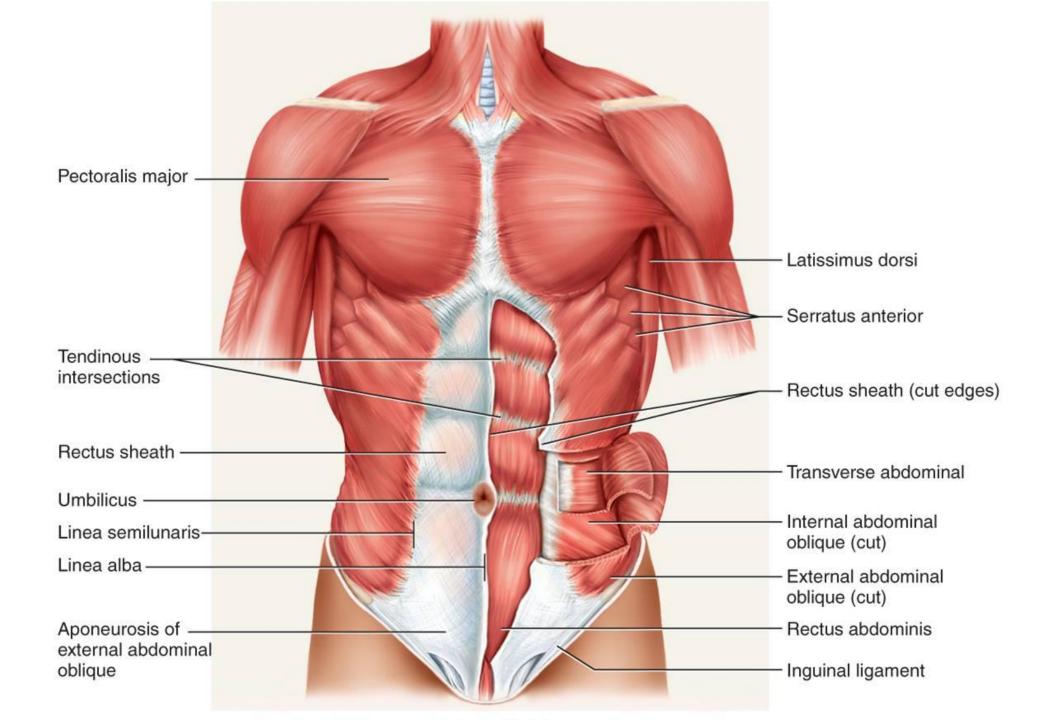
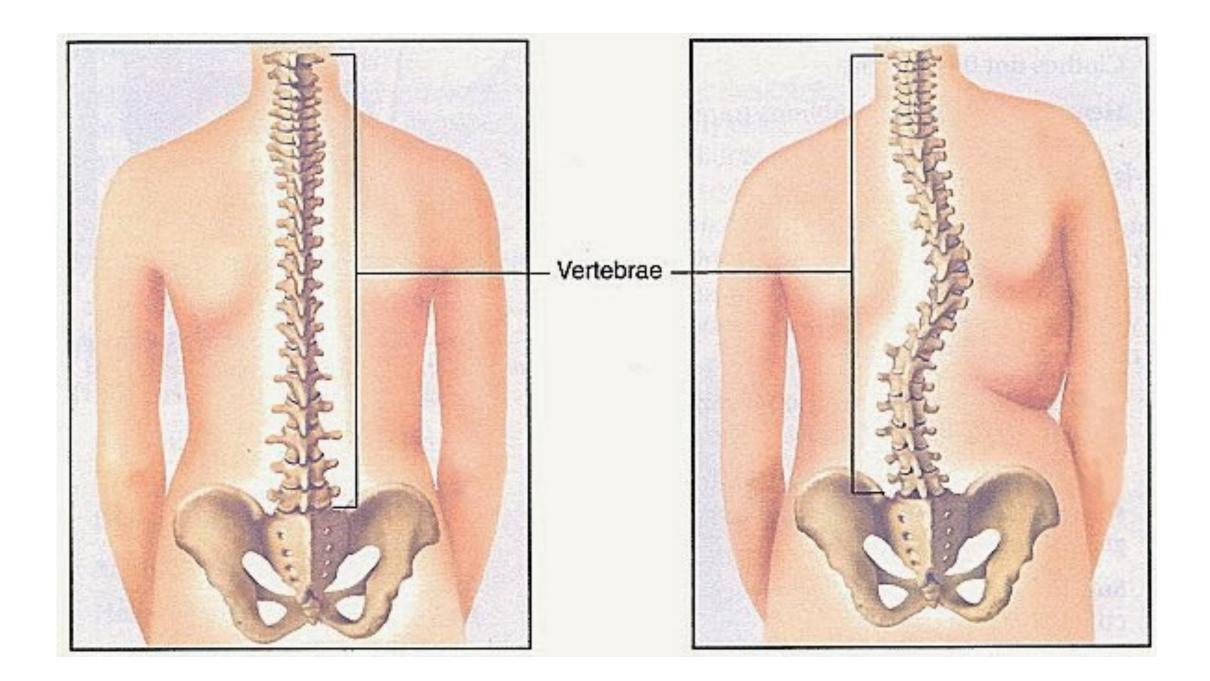


Figure 28









The thoracic vertebra and the mobility of the thoracic region

Patrice Thiriet

Realisation: Olivier Rastello



