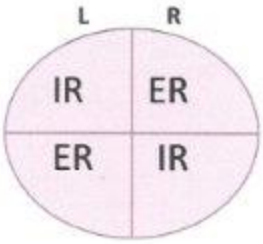
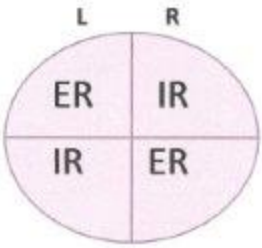
Anterosuperior-posteroinferior axis/ vertical axis(side-bending component)

L side bending rotation

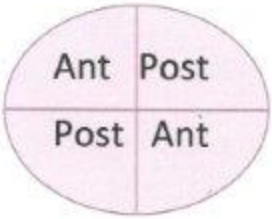


Right side bending rotation

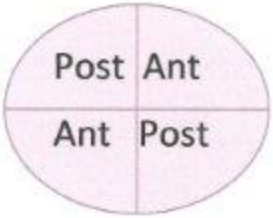


Vertical axis

Left lateral strain



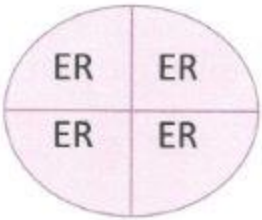
Right lateral strain



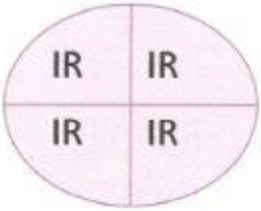
Cranial strains (from the front)

Transverse axis

Flexion

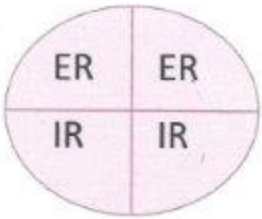


Extension

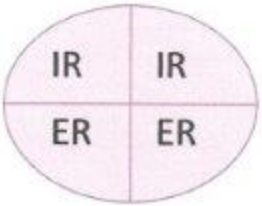


Transverse axis

Superior vertical strain

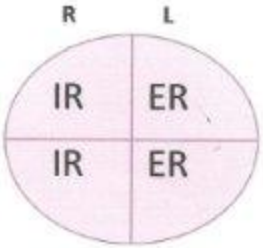


Inferior vertical strain

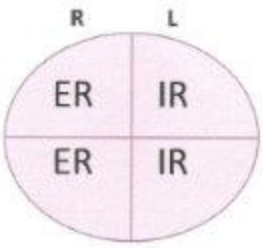


Anterosuperior-posteroinferior axis

Left torsion



Right torsion



Cranial strain	Cerv. Position		Stance	Eyes postition
Left torsion	L side bending	R rotation	R foot forward	L anterior canal(SB)- eyes to R and up R horizontal canal(rot)- eyes to L
L side bending roation	R side bending	R rotation	R foot forward	R horizontal and R anterior canal- eyes to L and up
R torsion	R side bending	L rotation	L foot forward	R anterior canal(SB)- eyes to L and up L horizontal canal(rot)- eyes to R
R side bending roation	L side bending	L rotation	L foot forward	L horizontal and L anterior canal- eyes to R and up

MORPHOLOGICAL ANALYSIS

Characteristics based on the Kretchmer biotypes.

Facial and Bodily Signs and Characteristics:

Asthenic	Syntonic	Pyknic
Thin triangular face	Square face	Full round face
Thin upper lip - as a rule		Full lips
Long nose - high bridge		Small depressed nose
Narrow bridge		Wide bridge
Rapid pulse (Mu slows)		Slow pulse (Mu increases)
Hollow cheeks		Full round cheeks
Mouth closed, eyes open		Mouth open, eyes closed
Pointed, very narrow chin		Globular chin
Long neck		Short neck
Long extremities		Short extremities
Bass voice		Tenor voice
Trunk short & narrow		Trunk long & full
Shoulders square, high, angular		Shoulders sloping
Crowded ill-set teeth		Teeth even, not crowded
High cheek bones		Depressed cheek bones
Bony		Fleshy
Pale		Red
Tall - usually		Stodgy
Lips pale		Lips red to purple
Eyes large, maybe narrow PD		Eyes small, wide PD
Delicate texture skin		Rather coarse skin
Narrow head		Wide head
Tend to be fleshier after 35		
Functional Tendencies or Trends:		
High metabolic rate		Low metabolic rate
Hyperopia		Myopia
Esophoria		Exophoria
Dyspepsia		Asthma
Hypotension (low BP)		Hypertension (high BP)
Hyperthyroid		Hypothyroid
Headache		Apoplexy
Melancholia		Fatty degeneration heart & kidneys
General debility		Inflammations - gouty type
Wasting diseases		Rheumatism
Dizziness		Scrofula (swollen lymph glands)
Intestinal cramps (gas)		
Heart failure, Class IV		Diabetes - Mendelian recession
Menstrual cramps - at times		Menorrhagia (profuse flow)
Gastric ulcers		Gall bladder
Tumors (cystic)		Tumors
Acidosis		Alkalosis

Wallace law:

1) The orbit protects the globe influencing its shape.
2) The globe tends to remain in the relative center of the orbit to keep the fovea in the line of sight.
3) Each cranial strains creates specific fixation disparity compensated by position and movement of the C/Th/L spine as descending patterns of compensations are dominant in human population
4) Cranial flexion will facilitate exophoria (eyes-globe being wider and shorter with the orbit being shallower) and hyperopia with undercovergence dysfunction and inefficient, structurally based divergence. Fovea will move nasally with optic nerve being on slack as the inferior and superior oblique pull the fovea nasally and anteriorly at the 35° rotational axis. Obliques, with the attachment on the posterior globe, contracting concentrically promote the positions of the exophoria and hyperopia. This is checked by eccentrically contracting superior and inferior recti attached to the anterior globe.

- Cranial extension will facilitate esophoria (eyes-globe being longer and taller with the orbit being deeper) and myopia with underdivergence dysfunction and inefficient, structurally based convergence. Fovea will move temporally with optic nerve being taut as obliques working eccentrically move the globe posteriorly and temporally deeper into the orbit at the 35°rotational axis. This will facilitate position of esophoria and myopia reinforced by concentrically contracting superior and inferior recti muscles.

5) Symmetrical tension of superior and inferior oblique and recti muscles while assuming the exophoria or esophoria position will be dependent on the optimal and neutral position of the C spine

6) Cranial strains of torsion and side-bending rotation can create the hyperhoria as a form of compensation. Possibly more embedded on the side of flexed – externally rotated sphenoid(higher greater wing), less difficult to correct on the side of extended-internally rotated sphenoid (lower greater wing)

Cervical spine and sphenoid position in the sagittal plane will influence tension of the specific superior and inferior oblique and recti muscles, for example-in cervical extension superior oblique and inferior recti will be dominant based on VOR.

Comitant deviations

- Head tilt down for eso, up for exo
- In eso or ortho-head tilt towards hypophoria
- In exo- towards hyperphoria
- In paresis- head tilt towards field of action of the paretic muscle with eyes turning in opposite direction
- Hyperphoria at far- SR/IR, at near- IO/SO
- Difference from far to near > 10 PD is a sign of abnormal ACA
- Excessive high eso at near compared to far- high ACA
- Excessive exo at near compared to far- low ACA