Classification of Osteopathic Lesions

Lesions are named by "where they want to go"
Restrictions are named "by where it is restricted" where it doesn't want to go

Example:

- C4 can't go Sb R/Trans L= SB restriction
- Lesion named/ by where is likely to go (ease in the movement)
- A/PRS_L

How to classify a lesion:

- Every structure in the body has 3 axis that it moves around
- Lesions are named by how many axis they have lost
- When we move, we move around this axis
  - Vitality
  - Compactions/Intraosseous/Intraparenchymal
  - Scars/Adhesions: Visceral
  - Non Phys wout respect- lost all three axis, can't move, (shear or derailed
  - Non Phys w respect- lost two axis of the three axis, can still move around two axis
  - Physiological- lost 1 of the three axis, can still move around
  - Restriction- soft tissue

Fixity: is the anchor point of the lesion

1. **Primary Osteopathic Lesion:**
   - ***Somatic dysfunction that maintains a total pattern of dysfunction, including other second dysfunction/initial of first somatic dysfunction to appear temporally***
2. **Secondary Osteopathic Lesion:**
   - ***Somatic dysfunction arising either from mechanical or neurophysiological response after or as a consequence of other aetiologies***
3. **Non-segmental intraosseous compaction-** anywhere within the innominate
4. **Intersegmental compaction-** at the acetabulum (ossification sites)
5. **Shear-** an action or force causing or tending to cause two contiguous parts of articulation to slide relative to each other in a direction parallel to their plane of contact NRWOR
6. **Compaction-** somatic dysfunction in which two structures are forced together
7. **Paradox-** when something is moving in opposite motions
   Can't have a paradox in PRM
   Always NPWR

Classification of Osteopathic Lesions

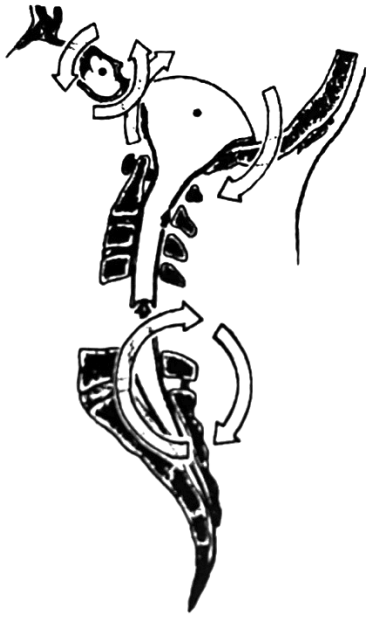
What technique should you use for what Osteopathic lesion?

Name of tech	Abbreviation	Correction tech
Vitality		
Compactions /Intraosseous/Intra Parenchymal		
Scars/Adhesions		
Non-Physiological without respect to axis	**NPWOR**	OA
Non-Physiological with respect to axis	**NPWO**	Functional
Physiological	**PHYS**	MET, Functional, EofL
Restriction	REST	MET, Functional , EofL

PRM of occiput and sacrum

Expansion=cranial inspiration-flexion	Retraction=cranial expiration-extension
SBS= elevates; sphenoid and occiput rotate about a transverse axis	SBS= descends returning to its initial position, rotate about a transverse axis
Dural membranes tighten	Dural membranes release
Three diaphragms contract and descend	Three diaphragms relax and ascend
Vertebral curves diminish	Vertebral curves reform
Sacral base moves posteriorly	Sacral base moves anteriorly,

igure 8 Craniosacral extension.



igure 13 Craniosacral flexi

- **Expiration lesion** of the ribs- the ribs won't go down
- **Inspiration lesion** of the ribs- ribs won't go up

7 Parameters of Mobility That You Can Stack:

Compression	Traction
Cephalic (Superior)	Caudal (Inferior)
Anterior	Posterior
Flexion	Extension
Rot R	Rot L
SB R	SB L
Breath	

3 Rectilinear: Compression, Traction / Cephalic, Caudal/ Anterior, Posterior
3 Curvilinear: Flexion/ Extension, ROT R/L , SB R/L
Breath

Stack the Parameters:
Functional -into ease (5F)
Structural- Direct (into rigid) (SF)

Integration of Structural and Functional Parameters

Structural (S) ⟷ **Functional (F)**

6S-0F **Total Structural Approach** For a volumetric resistance density Or rigidified (sometimes old) linear Resistance	*5S-1F* Offering the Body on possibility to escape	*4S-2F*	*3S-3F*	*2S-4F* 1st S= reaching the level 2ndS= correction	**1S=5F** 1S Reaching the level 5F=no friction, in posture	*6F* Posture and **total functional approach**

7th parameter/ amplifier
The Breath

Cranial Osteopathic lesion	
Vitality	○ Expansion/retraction
Compactions /Intraosseous/ Intraparenchymal	○ Intraosseous compaction ○ Compaction with neighboring bone

Classification of Osteopathic Lesions

Scars/ Adhesion	○
Non-physiological without respect axis	○ Translated or sheared ● Ant ● Post ● Medial ● Lateral ○ Overlapped sutures (ref. infant)
Non-physiological with respect of axis	○ One or more parameters goes in wrong direction ○ Paradox between mobility & motility ● Ex: IR with expansion
Physiological	○ Only show 1 parameter ER or IR
Restrictions	○ One parameter or more lacks amplitude

SBS Osteopathic lesion	
SBS Normal Motility **PRM**	▪ Expire+AR/Sup ▪ Inspire+PR/Inf
Vitality	
Compactions **Intraosseous/ Intraparenchymal**	
Scars/ Adhesions	
Non-Physiological Wout Respect of Axis (NPWOR)	● Traumatic Vertical Strain ● Traumatic Lateral Strain
Non-Physiological W Respect of Axis (NPWRA)	● SBR ● Membranous Vertical Strain ● Membranous Lateral Strain
Physiological	● Flex-extension ● Torsion
Restrictions	

Cranial Inspiration/Expansion/ Flexion	**Cranial Expiration/Retraction/ Extension**
ER	**IR**
Squama Separation	**Squama Compresses**
Mastoid Post/Med	**Mastoid Ant/Lat**

Classification of Osteopathic Lesions

Mandibular condyle Post/med	Mandibular Condyles Ant/Lat

Temporal Mobility Osteopathic Lesions	
Normal Motility (PRM)	▪ Combined movement -Wobbly wheel (ER/IR) ▪ *A/P axis:* CSM-SS pivot-inflare/outflare ▪ *Transverse axis:* external auditory meatus- anterior/posterior rotation ▪ Expiration/flexion/ER ▪ Inpiration/extension/IR
Vitality	
Compaction Intraosseous/Intraparenchymal	
Scar/Adhesion	
Non-physiological without respect of Axis NPWOA	● No motion ● Shear
Non-physiological with respect of axis NPWA	● ARwClosure of squama ● PRwclosure of squama
Physiological	● Absence of ER/IR
Restrictions	● Decreased motility of ER/IR

Lower (C2-C7) Cervical Spine Osteopathic Lesions	

Classification of Osteopathic Lesions

NORMALITY (C2-7) **PRM**	▪ CERVICAL LORDOSIS -diminish during PRM Flexion, and all C-spine will cephalic
Normality (C2-7) **Biomechanics**	▪ Flexion/Extension ▪ RS movements as a group
Vitality	▪
Compactions/Intraosseous	▪ Intraosseous vertebra ▪ Compaction between 2 vertebrae
Adhesions/Scars	▪ Regarding to cervical area/Dural adhesion
Non-physiological without respect of Axes **(NPWOR)**	All discocorporeal lesions ● Traumatic translation (Ant, Lat, compression, separation) ● One vertebra in SR alone One vertebra in RS alone the curvature ● C2-3 ARS ● C5-7 PRS ● C4: depending on tendency of curvature
Non-Physiological with respect of axes **(NPWO)**	Paradoxical combination of PRM parameters: One vertebra alone in RS going along with curvature ● C2-3 in PRS ● C-5-7 in ARS ● C4 depending of tendency on the curvature
Physiological	▪ Flex/Ext or **RS** of the whole curvature ▪ Inhale/Exhale of PRM
Restrictions	▪ Tension in the muscles, fascia, viscera or dura mater tension

Classification of Osteopathic Lesions

Clavicle Osteopathic Lesions	
Normality **PRM**	▪ Inhalation : Anterior rotation + expansion ▪ Exhalation : Posterior rotation + retraction ▪ *** on transverse axis, passing through the clavicule***
Normality **Biomechanics**	▪ Thoracic inhalation: posterior rotation ▪ Thoracic exhalation: anterior rotation ▪ W cranio-cervical induction: ▪ Head flexion=post RT ▪ Head extension= ant RT ▪ RT of head to R= ▪ Post RT of R clavicle ▪ Ant RT of L clavicle ▪ RT of head to L= ▪ Post RT of L clavicle
Vitality	▪
COMPACTION/ **INTRAOSSEOUS/Intraparenchymal**	▪ Sterno-clavicular or acromio-clavicular compaction ▪ Intraosseous compaction
ADHESION/SCARS	▪ Related to clavicule zone
NON-PHYSIOLOGICAL WITHOUT RESPECT OF AXES	▪ superior or embedded AC ▪ superior, anterior or embedded SC
NON-PHYSIOLOGICAL WITH RESPECT OF THE AXES	▪ Paradoxal combination of PRM or biomechanical parameters
PHYSIOLOGICAL	▪ Physiological combination of PRM or biomec. Parameters
RESTRICTIONS	▪ Ligamentous, fascial or muscular tensions

Classification of Osteopathic Lesions

Sternum Osteopathic Lesions	
NORMALITY PRM	▪ *Flexion:* anteriorization of the angle of Luis (sterno-manubrium) + expansion ▪ *Flexion*=inhalation=cephalic w inferior sternum moving anterior ▪ *Extension*=exhalation=caudal w inferior sternum moving posterior
NORMALITY Biomechanical	▪ Following breathing and movements of the thorax: ▪ *Flexion/Extension*: flexion = goes anterior (more in the lower part, around a transverse axis through 5th SC)) + elevates ▪ Rotation and SB to follow thorax mvt
Vitality	▪
COMPACTION/ INTRAOSSEOUS	▪ Compaction of the sternal region ▪ Intra-osseous compaction
ADHESION/SCARS	▪ Related to anterior thoracic region
NON-PHYSIOLOGICAL WITHOUT RESPECT OF AXES	▪ Anterior/posterior translation or lateral translation of sterno-manubrial joint
NON-PHYSIOLOGICAL WITH RESPECT OF THE AXES	▪ Paradoxical combination of PRM or biomechanical parameters (elevation and anterior in inhalation)
PHYSIOLOGICAL	▪ Physiological combination of PRM or biomechanical parameters (inhalation/exhalation)
RESTRICTIONS	▪ Muscles, fascial or visceral tensions

Classification of Osteopathic Lesions

Upper Body Osteopathic lesion	Clavicle	AC	SC	GH	Ulnar	Radius
Normality						
Vitality						
Compaction **Intraosseous** **Intraparenchymal**						
Scars/Adhesions						
Non-physiological without respect of Axis **NPWOA**		Ant Post Super Embedded	Post Sup Infer Ant	Ant Post Super Infer	Dislocation	Dislocation
Non-physiological with respect of axis **NPWA**			Ant/Sup Post/Inf			
Physiological	Ant/Post		Ant/Infer Post/Sup		Med/Lat	Ant/Post
Restrictions						

Rib Osteopathic Lesions	
NORMALITY **PRM**	▪ *Inspire:* RE (vertical axe) + elevation BH and PH (virtual axe between CV-CT) + expansion ▪ *Expire:* opposite
NORMALITY **Biomechanical**	▪ Rib ▪ *Inhalation:* RE + elevation BH and PH ▪ *Exhalation:* RI + lowering BH and PH
Vitality	▪
COMPACTION/ INTRAOSSEOUS	▪ Compaction (CV, CT, CC or SC joint) ▪ Intra-osseous compaction
ADHESION/SCARS	▪ Related to anterior or posterior thoracic region
NON-PHYSIOLOGICAL WITHOUT RESPECT OF AXES	▪ Subluxation of the SC (ant/post, up/down) ▪ Compression/separation of CC ▪ Embedded head of the rib (CV) ▪ Traumatic superior 1st rib ▪ Shear of floating rib (K11-12) ▪ Traumatic A/P compression of the rib (M. Energy)

Classification of Osteopathic Lesions

	▪ Traumatic latero-medial compression of the rib (M. Energy)
NON-PHYSIOLOGICAL WITH RESPECT OF THE AXES	▪ Paradoxical combination of PRM or biomechanical parameters (ex.: BH inhale + PH exhale + IR) ▪ ▪ IR or ER rotation (around vertical axe mvt, not resulting of PH and BH)
PHYSIOLOGICAL	▪ Physiological combination of PRM or biomechanical parameters (ex.: BH inhale + PH inhale + ER)
RESTRICTIONS	▪ Muscle, ligamentous or fascial tensions

Thoracic Spine Osteopathic Lesion	
NORMALITY PRM	▪ *Inspire* = expansion and goes cephalic, elongation/curvature erasing ▪ *Expire* = retraction and opposite mvt
NORMALITY Biomechanical	▪ Flexion/extension ▪ ▪ (N)SR curvature ▪ When Sx does G/G, Lx goes SR right, Dx goes SR left
Vitality	▪
COMPACTION/ INTRAOSSEOUS/Intraparenchymal	▪ Intervertebral compaction ▪ Intra-osseous compaction
ADHESION/SCARS	▪ Relate de dorsal spine and ribs (ex.: dura-mater adhésion)

Classification of Osteopathic Lesions

NON-PHYSIOLOGICAL WITHOUT RESPECT OF AXES	All disco-corporeal lesion: - 2nd degree lesion - Pure traumatic translation (ant, lat, compression, separation) Vertebra outside normal curvature - T1-T5 in PRS - T7-T12 in ARS - T6 in PRS or ARS (depending of the apex of the kyphosis) Vertebra alone in SR = lateral translation
NON-PHYSIOLOGICAL WITH RESPECT OF THE AXES	Paradoxal combination of PRM parameters. Vertebra in normal curvature - T1-T5 in ARS - T7-T12 in PRS - T6 in ARS or PRS (depending of the apex of the kyphosis) Group of 3-4 vertebrae in viscero-somatic reflex (Martindale)
PHYSIOLOGICAL	▪ Flexion/Extension or SR ▪ Inspir/Expir PRM
RESTRICTIONS	▪ Muscule ,ligamentous, capsuler or fascial tensions

Lumbar spine Osteopathic Lesion	
Vitality **Compaction**	
Compaction **Intraosseous/Intraparenchymal**	●
Scar/Adhesion	●
Non-physiological without respect of Axis **NPWOA**	● ARS L1-2 & ASR L1-2 ● PRS L4-5 & PRS L4-5 ● Any translation ● L5 translation ● 2nd degree ● PRS L3 when Hyoadapted ● ARS L3 when Hyperadapted
Non-physiological with respect of axis **NPWA**	● PRS L1-2 & PSR L1-2 ● ARS L4-5 & ASR L4-5

Classification of Osteopathic Lesions

	• PRS L3 when Hyperadapted • ARS L3 when Hypoadpated
Physiological	• Group SR
Restrictions	• One restriction or more in restriction

Sacral Osteopathic lesions	
Vitality **Compaction**	
Compaction **Intraosseous/Intraparenchymal**	•
Scar/Adhesions	•
Non-physiological without respect of Axis **NPWRA**	• Derailed (any shear-cephalic, caudal, ant, or post)
Non-physiological with respect of axis **NPWRA**	• LonR • RonL • Posterior torsions
Physiological	• Bilateral Ant or Post • LonL • RonR • Anterior torisons
Restrictions	• Muscles/fascia • Piriformis

Ilium Osteopathic Lesions	
Normality	• **AR/PR=Transverse** • **Outflare /Inflare= vertical axis SI Joint** • **ABD= OB/AP Axis** • **ADD= pubic Symp/SI joint**
Vitality	•
Compaction **Intraosseous/Intraparenchymal**	•
Scars/ Adhesion	•
Non-physiological without respect of Axis **NPWOA**	• Ant • Post • Superior=Upslip • Inferior=Downslip
Non-physiological with respect of axis **NPWA**	• AR+inflare • PR+outflare
Physiological	• Pseudorotation

Classification of Osteopathic Lesions

	• PR + Inflare • AR+ Outflare
Restrictions	• Psoas • QL • Illiopsoas

Pubic Symphysis Osteopathic Lesions	
Normality	• AR (+ Outflare) of ilium: antero-inferior pubic branch • PR (+ inflare) of illium: postero-superior pubic branch • Pseudorotation in walking
Vitality	
Compaction Intraosseous/Intraparenchymal	
Scars/Adhesions	
Non-physiological without respect of Axis NPWOR	• Shear
Non-physiological with respect of axis NPWA	• AR/Super • PR Outflare
Physiological	• Pseudorotation
Restrictions	• Pelvic Floor,ABS

Femoral Patellar Joint Osteopathic lesion	
Normality	• Flex/Ext: transverse axis • ABD/ADD: A/P axis • ER/IR: Vertical axis
Vitality	
Compaction Intraosseous/Intraparenchymal	
Scars/Adhesions	• From soft tissue patella, retinaculum, bursa, fat body
Non-physiological without respect of Axis NPWOA	• Compression/separation lesion, medial/lateral glide
Non-physiological with respect of axis	• Paradoxical comb. (flex with cephalic glide)

Classification of Osteopathic Lesions

NPWA	
Physiological	• Caudal glide with flex, cephalic glide with extension
Restrictions	• Tension from muscles, ligaments, fat body affecting the patella

Knee Joint Osteopathic lesions	
Vitality **Compaction**	
Compaction **Intraosseous/Intraparenchymal**	
Scars/ adhesions	▪ Global/ specific of condyles-tibial plateau ▪ Knee joint, loss of gliding
Non-physiological without respect of Axis **NPWOA**	• Compression/separation • Ant/Post glide • Lat/Med glide
Non-physiological with respect of axis **NPWA**	• Valgus/varus, paradox of mobility/motility
Physiological	• Rot, physiological comb.Flex+RI, Ext+RE
Restrictions	• Muscular and soft tissue retraction induce a reduce or deviated movement

Normal movement of the menisci	1	2
Knee flexion (menisci post)	femoral condyles rolling backwards on the tibial plateau	femoral condyles rolling backwards on the tibial plateau
Knee Extension (menisci ant)	femoral condyles rolling forwards By the quadriceps apparatus and patella vis the patella-meniscal ligaments	Post menisco-femoral ligament pulls the lateral meniscus forwards while the MCL pulls the medial meniscus forward
External Rotation of Tibia	Medial meniscus move post	Lateral meniscus move ant
Internal Rotation of the Tibia	Medial meniscus move ant	Lateral meniscus moves post

Meniscal Osteopathic lesions	

Classification of Osteopathic Lesions

Vitality **Compaction**	
Compaction **Intraosseous/Intraparenchymal**	
Scars/Adhesions	▪ Femoral tibial global compaction of menisci ▪ Intra meniscal/ involved soft tissue
Non-physiological without respect of Axis **NPWOA**	● Tissular lesion, tear, pinched meniscus under femoral condyle ● Medial glide
Non-physiological with respect of axis **NPWA**	● Paradoxical combination motility/biomechanical
Physiological	● Physiological combination motility/biomechanical ● Ant/post glide, dissociated rot in relation to plateau
Restrictions	● Tension from muscle, capsule, ligaments, fat body