

Mulligan Concept Thoracic & Lumbal Spine

By:

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Lumbar Spine SNAGS

Used to improve functional limitation:

- Flexion
- Extension
- Side bending Left / Right
- Axial Twist Left / Right
- Standing and Sitting
- Central - spinous process
- Unilateral - articular pillar



SNAG - Lumbar Spine Flexion

- Sitting
- Standing
- 4-point kneeling
- Self SNAG

Hypothenar eminence on the spinous process - can use thumbs - Force in line with joint plane

Vary angle with the plane of the joint, as the segment moves: *DYNAMIC TREATMENT PLANE*



SNAGS Lumbar Spine

- **Grip:**
 - **Central contact**: primary contact on spinous process
 - **Unilateral contact**: primary mobilising contact is on facet & TP using hypothenar eminence.
- **Direction:** Glide cranially
- **Postural Variations:** sitting, standing, prone (extension), 4-point kneel (flexion) position.
- Consider SNAG in opposite direction first (F to E; or E to F); *Stuck drawer analogy*



Lumbar SNAG

Hypothenar eminence

Thumbs



Lumbar SNAG

Start Position



Thumb contact



L5 SNAGs

- Palpating / mobilising the L5 facet is difficult due to fascial overlay
- Use of a vertical thumb is critical!
- The mobilising thumb should be parallel to the lumbar facet plane.
- Use the medial border of the thumb & reinforce with opposite thumb, P/A then cranial glide
- Can we use a belt?



Lumbar Flexion SNAG (sitting)

Mobilisation:

- Antero-superior glide

Movement:

- Lumbar flexion in sitting

Comments:

- Stand beside pt
- Belt around pt's ASIS
- Vary contact SP, TVP



SNAG - Lumbar Flexion (Standing)

Mobilisation:

- Cephalic glide

Movement:

- Flexion in standing

Comments:

- Patient stabilizers with hand on bed for safety
- Vary contact SP, TVP
- Slight flex knees?



SNAG -Alternate stabilization



Self SNAG - Flexion



SNAG - Lumbar flexion in 4-point kneeling



contact S.P. or T.P. with
hypothenar pad



MULLIGAN CONCEPT

SNAG - Lumbar flexion in 4-point kneeling

- **Position:** 4-point kneeling (quadruped) heels and knees apart
- **Grip:** Glide central or unilateral
- **Direction:** glide cranially along facet plane
- **Counter-stabilization:** non-mobilizing forearm over patient's shoulder to provide overpressure or as preferred under the abdomen (unless restrictive)



Self SNAG - with belt



Alternate belt fixation



MULLIGAN CONCEPT

Lumbar Spine SNAG - Extension

- Sitting
- Standing
- Prone
- Self SNAG



SNAG - Lumbar Extension - Sitting

Mobilisation:

- Antero-cephalic glide

Movement:

- Lumbar extension

Comments:

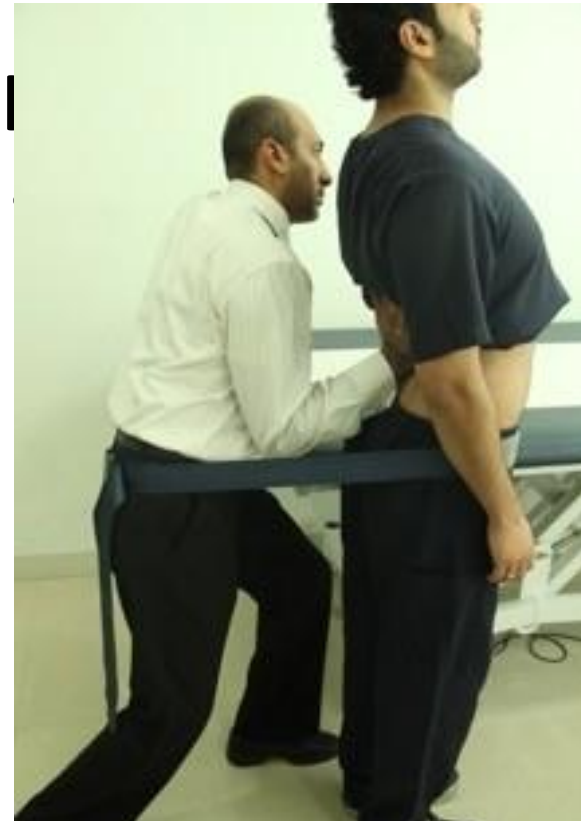
- Follow joint plane
- Do not pull - belt provides only stability
- Vary contact SP, TVP



Hand Grip & Position



SNAGS Lx Extension



SNAG - Extension - Prone



SNAG – Extension - Prone

- **Position:** At side of patient at the level of the mobilization
- **Stabilization:** PT's stabilizing arm under patient's torso superior to mobilizing hand
- **Grip:** SNAG facet plane glide (cranial) on central or unilateral + can provide some distraction
- **Movement:** Patient performs extension



Self SNAG - Extension



Self SNAG - Extension

- **Position:** Patient standing using belt or strap, belt under Sp to be mobilized, (hands at chest throughout movement). If standing, some knee flexion diminishes hamstring influence)
- **Direction:** Cranially glide after pulling belt anteriorly
- **Other Considerations:** May need to flex before extending; can be applied with a slump or shift correction



Self SNAG- Extension without belt

- Essentially only possible in standing
- **Central:** use the lateral aspect of the 1st phalynx of index in a clenched fist to contact SP
- **Unilateral:** use the MCP or PIP of the index in a semi-clenched fist to isolate (right hand for right unilateral etc.)



Lumbar Spine SNAG - Side Bending

- Standing **
- Sitting
- Self SNAG



SNAG - ROTATION

- Initial contact point spinous process
- Thoraco-lumbar region is most common region of dysfunction



Self SNAG- Rotation

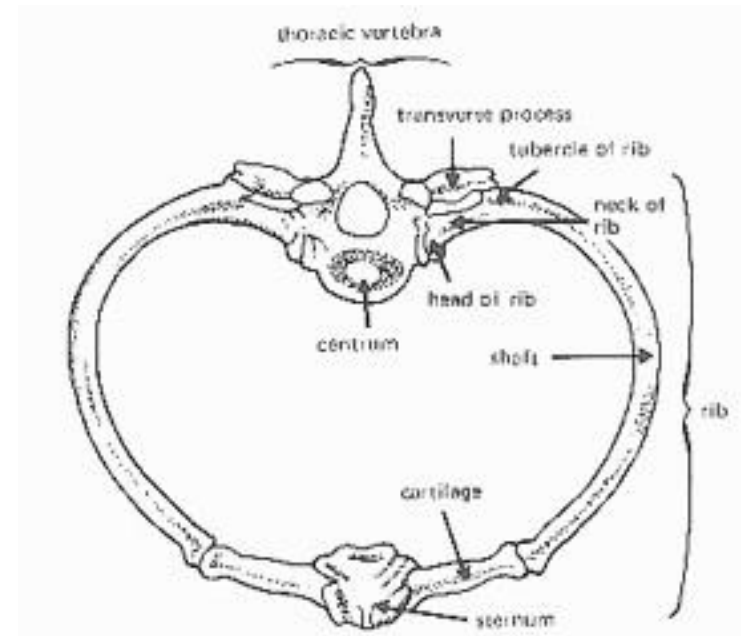
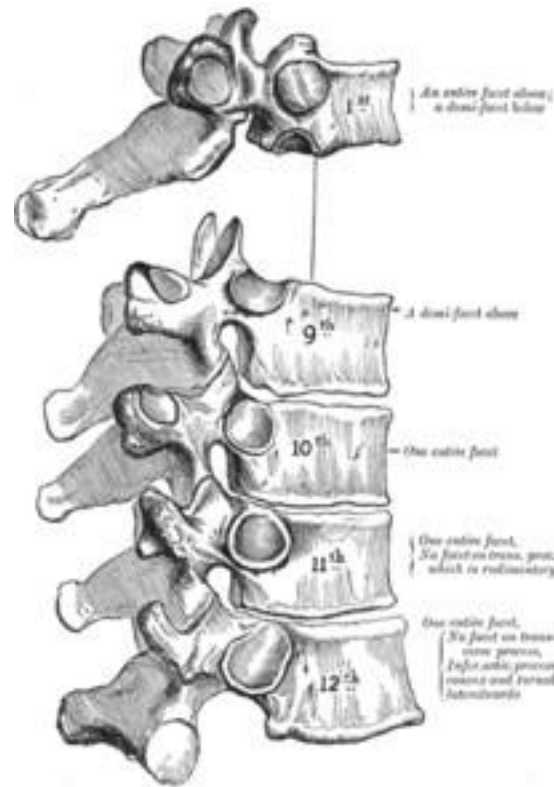


Notation

- SNAGS Cx 5-6 flex Rt.
- MWM Rt Elbow flex Lat glide.
- SNAGS Lx 4-5 Ex in Sitting.
- SNAGS Lx 2-3 Flex Lt in Standing.
- SNAGS Lx 4-5 Flex in Lion position.
- Self SNAGS Lx 4-5 Ex using Belt.



Thoracic Spine



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MULLIGAN CONCEPT

Hand grip



MULLIGAN CONCEPT

SNAG - Thoracic Extension



SNAG -Thoracic Rotation

- Mobilisation:
 - Cephalic glide
 - Assisted by trunk lift
- Movement:
 - Thoracic rotation
- Comments:
 - Vary contact point SP, TVP
 - Consider flex/ext starting position
 - Glide same side???



Thoracic Belt Traction

- Belt around therapist's shoulders; and positioned above suspected spinal level
- Cephalic glide produced by belt
- Localizes involved segment (only distal segments in decompression)
- Patient arms preferably on bed



Terimakasih