Shoulder Subluxation: Effective Treatment Approaches

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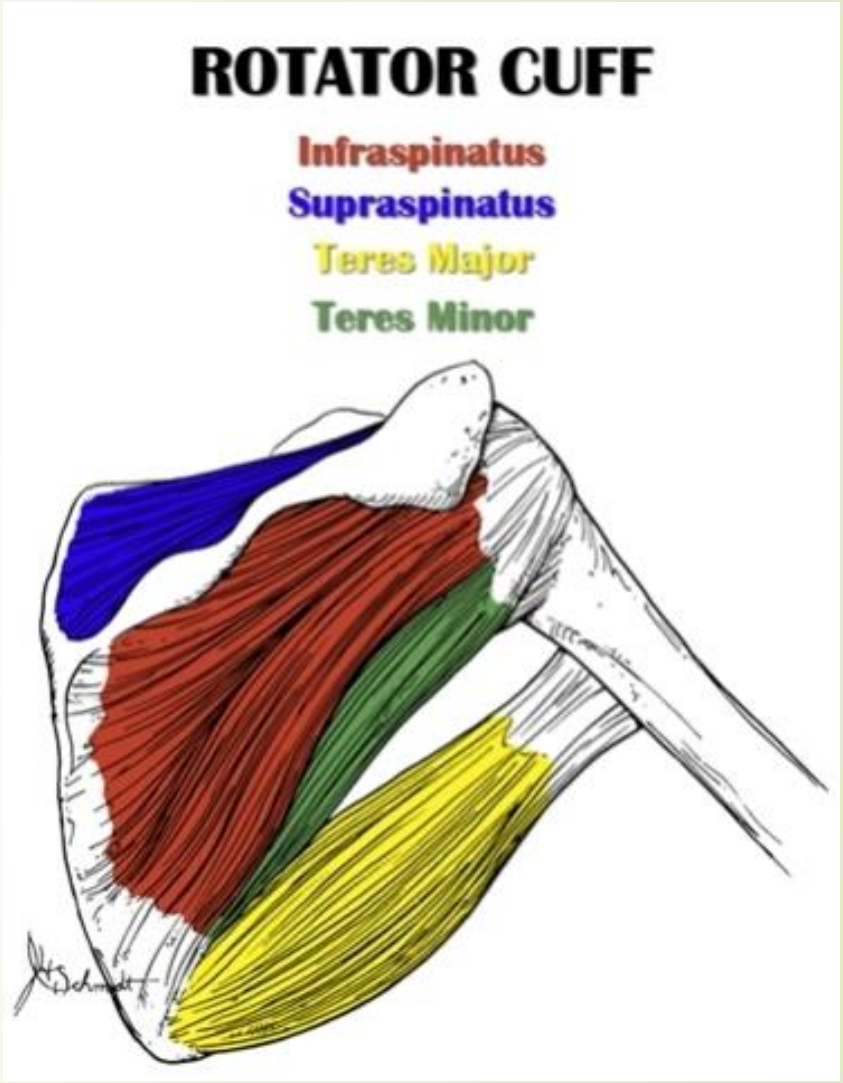
Shoulder Review
What do you know?

- A-C Joint: upper scap/clavicle (shrug)
- Gelnohumeral Joint: glenoid fossa of scap/humerus (all shoulder motions)
- Sternoclavicular Joint: clavicle/sternum (shrug, stabilize)

- Scapula 2:1

Shoulder Review
MM: move/stabilize

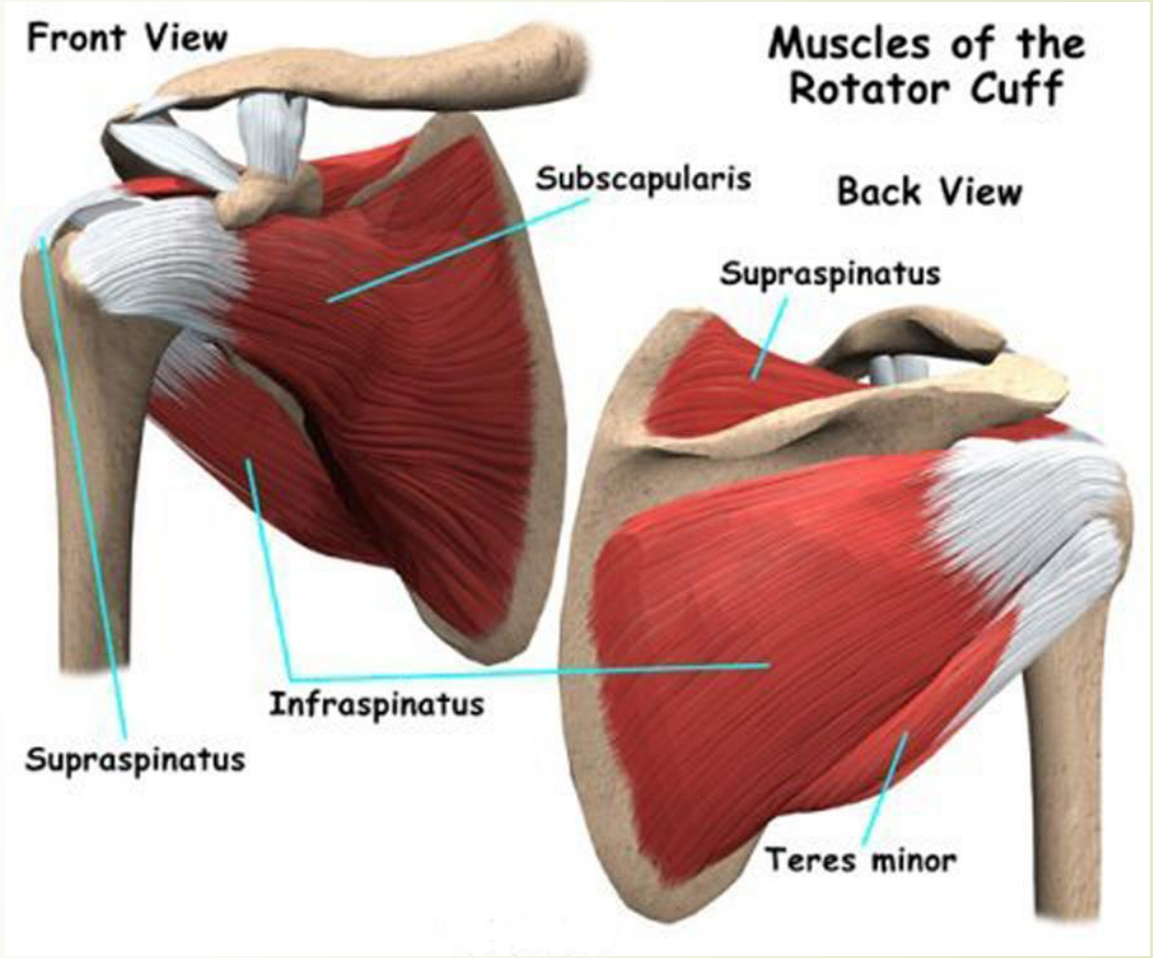
- Flexion: pec major, deltoid (ant), coracobrachialis.
- Abduction: deltoid, supraspinatus.
- Adduction: subscapularis, pec major, weight of arm.
- ER: infraspinatus, teres minor
- IR: subscapularis, latissimus dorsi, teres major, pec major, deltoid (ant)



Shoulder Review
"SITS"
Muscles of the RTC

- IR: Subscapularis
- ER: Infraspinatus, Teres Minor
- ABD: Supraspinatus
- ADD: Subscapularis

- "Raise & Rotate"
- Stabilize-Proximal Stability/Distal Mobility
- Depress the humeral head against the glenoid. (Subscapularis)(Tear: humeral head can migrate upward because of opposing force of deltoid.)



Shoulder Review

- Scapular Stability: trapezius, serratus anterior, rhomboid.
- Scapular Upward Rotation: trapezius, serratus anterior.
- Scapular Retraction: trapezius, rhomboids.
- Postural Support: levator scapulae, upper trap.
- Overhead Stability: coracobrachialis.
- Scapular Rotation: trapezius, serratus anterior, rhomboid, levator scapulae

Assessment

- pain, instability, stiffness, locking, catching, swelling.

- Dislocation, Arthritis, Adhesive Capsulitis: stiffness, loss of motion.
- G-H Instability(anterior): pain with 'throwing'.
- G-H Instability (multi-directional): generalized joint laxity.
- Labral Disorder: pain or 'clicking' with overhead motion.
- Impingement: Nighttime shoulder pain.
- Scapular Winging: serratus anterior, trapezius

- Neck pain and pain that radiates BELOW the elbow are often cervical spine disorder.

Shoulder Subluxation

- Mobility of shoulder makes it vulnerable for injury
- Partial dislocation
- tone

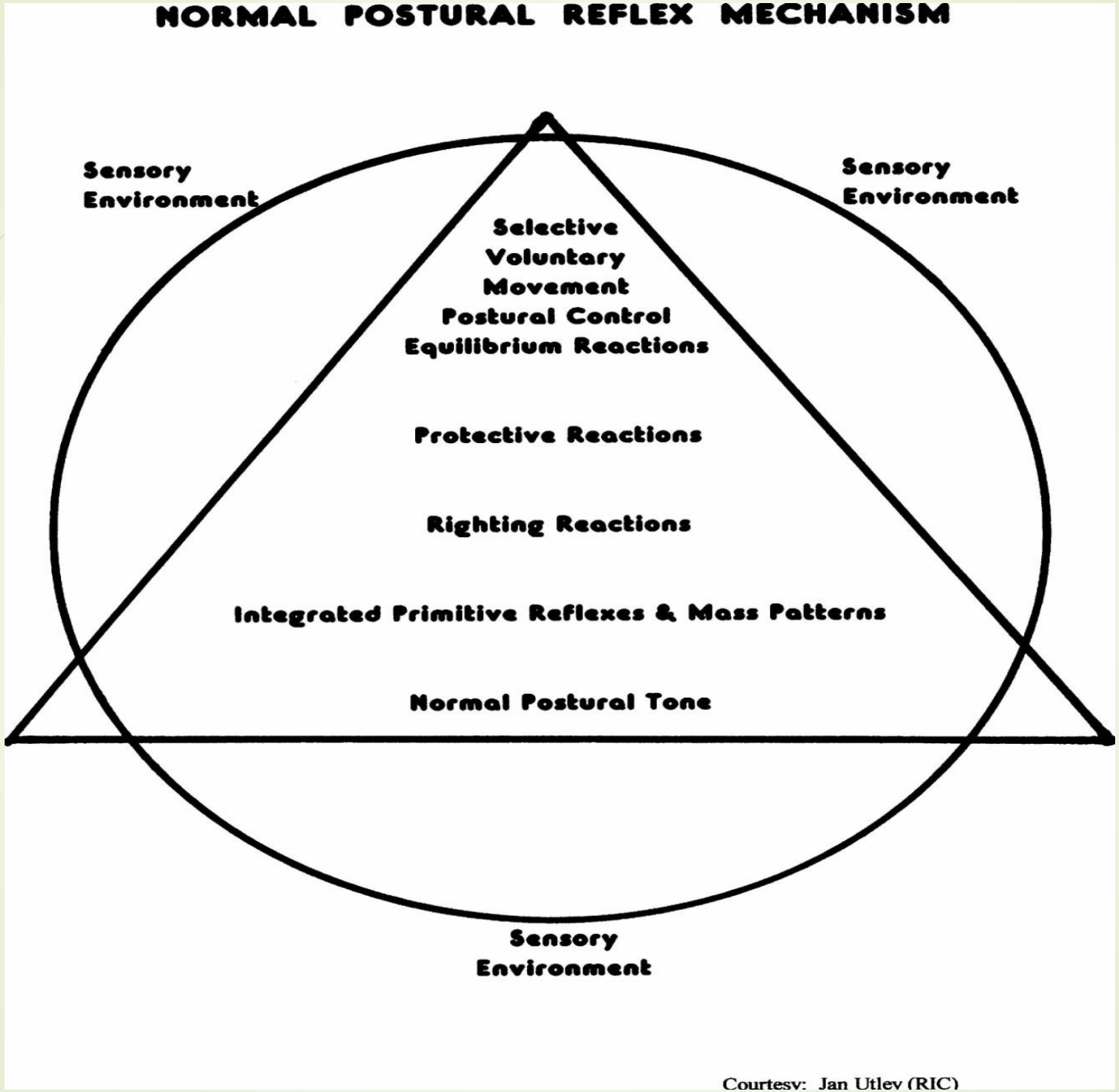
- pain
- swelling
- weakness
- Numbness

Separation of the joint as a result of paralysis or weakness of the rotator cuff muscles & spasticity of the scapular muscles

Absence of normal scapular-humeral rhythm

Sensory-Motor Premise to Recovery

- Motor control is the ability to make **dynamic** postural adjustments and direct body and limb movement in purposeful activity.
- Components necessary include:
  - normal muscle **tone**
  - normal postural tone and normal postural reflex mechanisms
  - selective **movement**/coordination.
  - Postural alignment
  - Proprioception/kinesthesia
    - Proprioception, which overlaps with kinesthetic awareness, provides a sense of body symmetry, or necessary balance and positioning between body parts, and specifically refers to a sense of **joint position.**
- The cerebral cortex, basal ganglia, and cerebellum work together to make motor control possible.


NORMAL POSTURAL REFLEX MECHANISM
Sensory Environment
Sensory Environment
Selective Voluntary Movement Postural Control Equilibrium Reactions
Protective Reactions
Righting Reactions
Integrated Primitive Reflexes & Mass Patterns
Normal Postural Tone
Sensory Environment
Courtesy: Jan Utley (RIC)

OT Tx Considerations: Subluxation

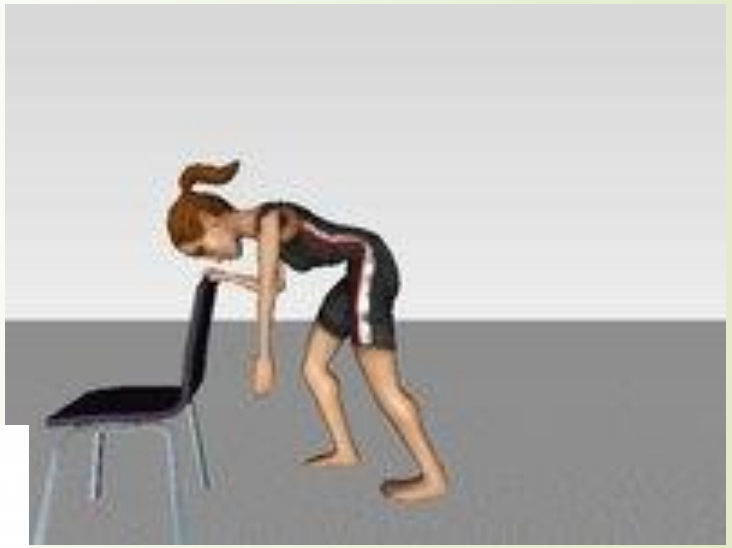
- Alignment/Positioning
- Tone
- Weight Bearing-Approximation
- Proprioception/Dynamics
- Normal Movement Patterns
- Repetition/Time
- Consideration of Pain

What is making Gravity NOT Work?

Continual Assessment of Key Points of Control

Alignment, ROM, Static vs Dynamic

- Codman's Exercise/Pendulum vs. Gravity Eliminated



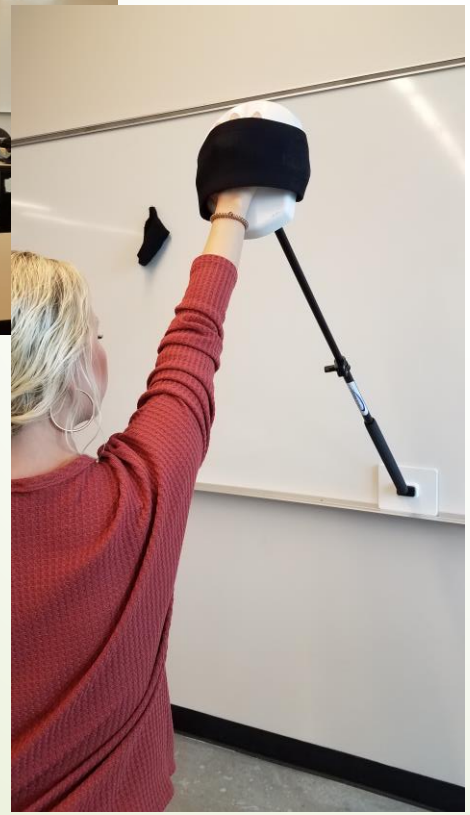
Weight Bearing

Dynamics Where There Isn't Any

Recognize the Sequence of Recovery

…for all diagnoses!

UE Ranger Magic!



Fluid, resistant-free patterned movement

Mobile Arm Support

Segmental Reach/Eye-Hand Coordination/Posture/Wt Shift

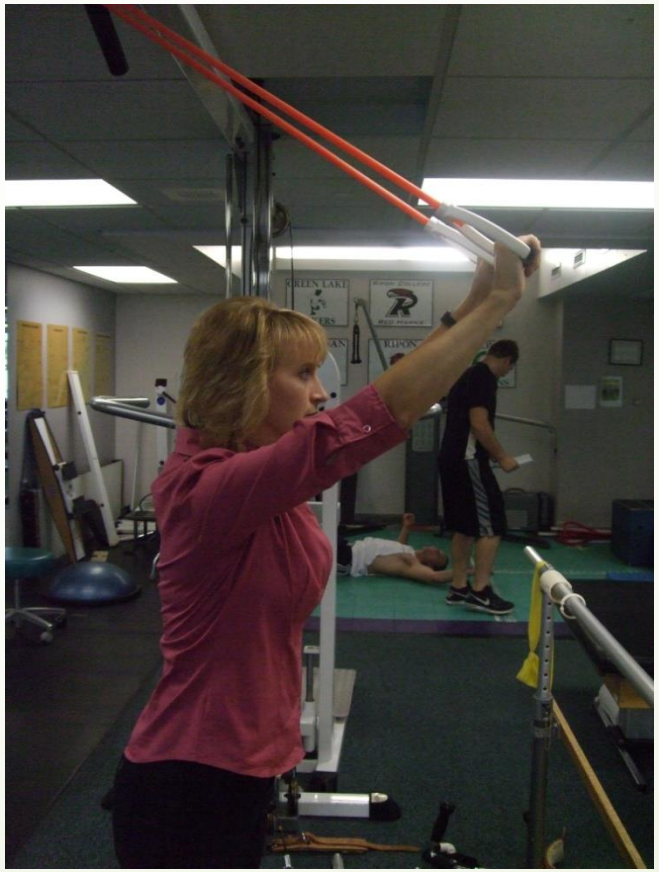
Scapula-Beautiful Symmetry


Club-Tek
1 lb.
Weight Bar
1 lb.
Weight Bar


HOIST


SHOULDER AND ELBOW
HAND AND WRIST
Hand Therapy
Weight Bar
Weight Bar

Sustained Suspension w/Tension Sensory-Motor Benefits of Dynamics




THIS TABLE IS
NEEDED BY THE
THERAPISTS. PLEASE
PUT YOUR
BELONGINGS IN THE
LOCKER ROOM. ASK
FOR A KEY AT THE
REHAB STAFF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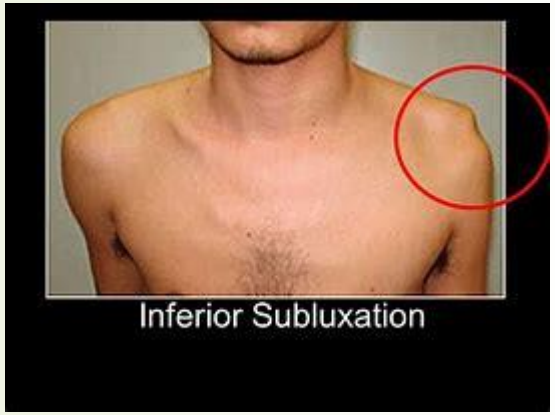
Treatment

- Dynamic Positioning/Antispasticity Ball Splint
- Alignment/Minimal use of W/C
- Passive Patterned Motion through all planes
- Weightbearing (Approximation/Traction)
- Movement on/off of Affected UE/Reach Patterns
- Normal Movement Patterns
- Giv-Mohr Sling
- UE Ranger
- Kinesiotape

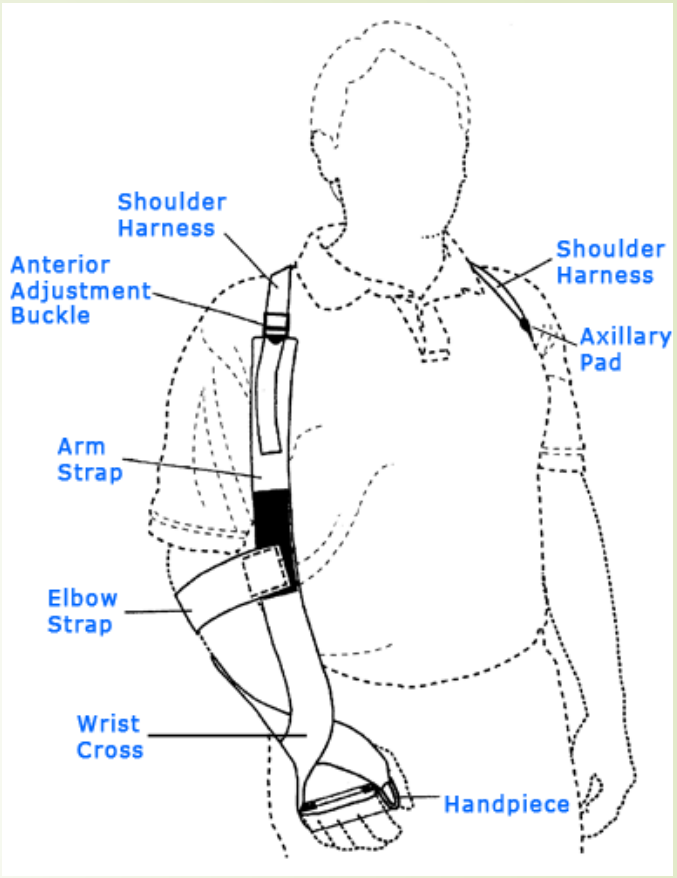
Slings: Protection, Injury Prevention, Pain Reduction, Ambulation



Soft tissue can become overstretched from the effects of gravity and improper handling of the arm. Stroke patients who have their arm unsupported and/or handled inappropriately (i.e. pulling on the arm) are at higher risk for traction neuropathy and injury.


Dutton, 2013

Giv-Mohr Sling



https://www.givmohrsling.com/research.htm#Dec05

Kinesiotape

Antispasticity Ball Splint

Alice found that throwing horseshoes was more fun if you aimed at people instead of a little stick in the ground.