

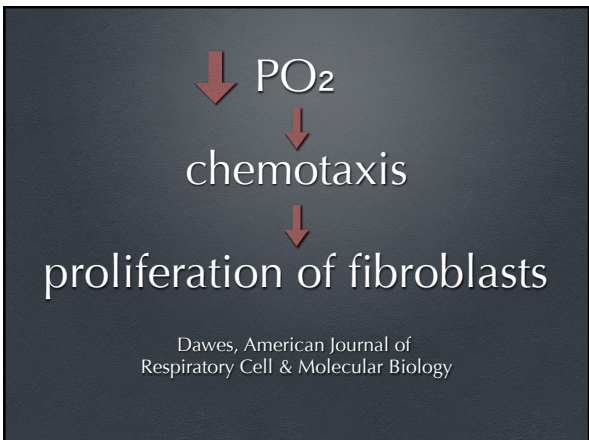


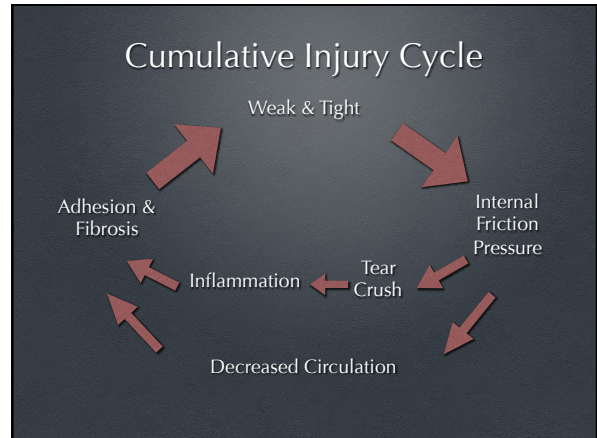
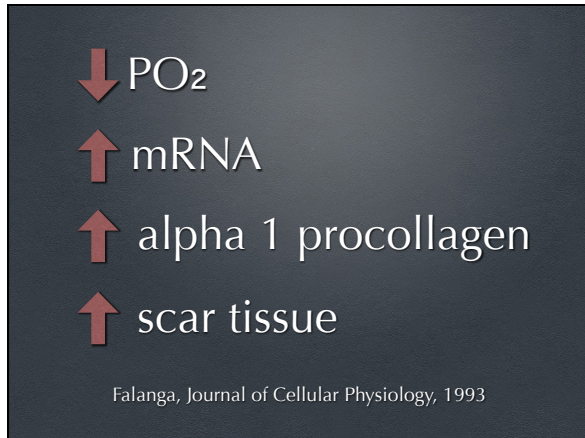
Law of Repetitive Motion

$$I \approx NF/AR$$

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I = insult to tissues
N= number of repetitions
F = force or tension
A = amplitude of motion
R = relaxation time





Fascia Contracts

Myofibroblasts contract slowly.
Length and tension change slowly.
Tension occurs over long lines and areas.
Contractions often not aligned with muscles.
Can be adhesions or contracture.

Soft-Tissue Changes After Injury

Inflamed: 24 hours - 72 hours
Stringy: 2 days - 2 weeks
Lumpy: 2 weeks - 3 months
Leathery: 3 months plus

Treating Fascia

Tension contractures 10 seconds to 3 minutes.
Reproduce limited motion or position.
Follow tension along any line.
Release entire line of tension.
Treatment tension sometimes higher than for muscle.

During treatment identify:

- Texture
- Tension
- Movement
- Function

The ART Process

- Patient presents with symptoms/history
- SFMA screen
- List of treatment protocols
- Use diagnostic algorithm
- Treat and evaluate tissues (diagnose)
- Related protocols and antagonists
- SFMA screen

Diagnosing Soft Tissue Lesions

- Nature of lesion
(tear, adhesion, crush)
- Exact Tissue
(pronator teres, median nerve, jt. capsule)
- Syndrome
(peripheral nerve entrapment, myofascitis)

Differentiating Tissues (APT)

1. Lock first tissue in place, move second.
2. Move tissues in opposite direction.

Performing an ART Protocol

- Shorten the affected tissue.
- Place contact and apply tension.
- Lengthen the tissue/cause relative motion.
- Release the tissue by using contact tension.

Long Tract Nerve Entrapments

Move the entire nerve and spinal chord while tensioning the tissue causing entrapment.

Complex Protocols

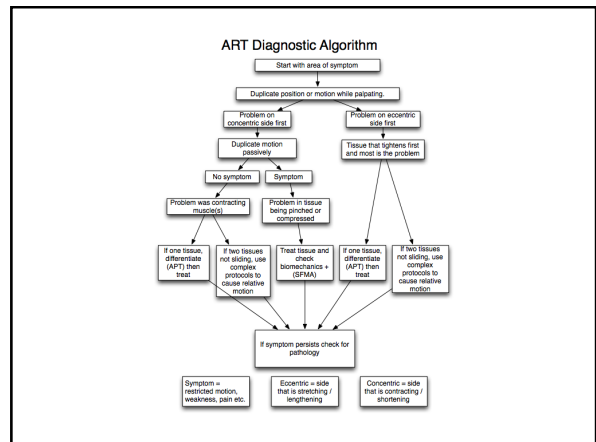
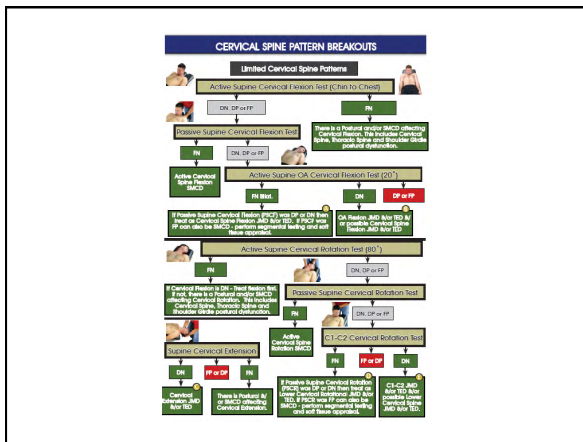
Problems within tissues
Problems between tissues
Reinforce motion between tissue

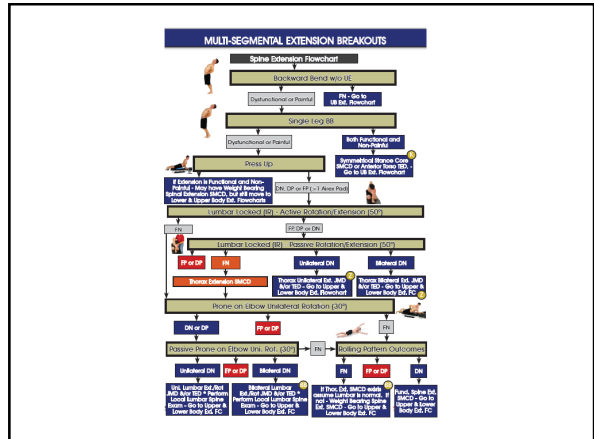
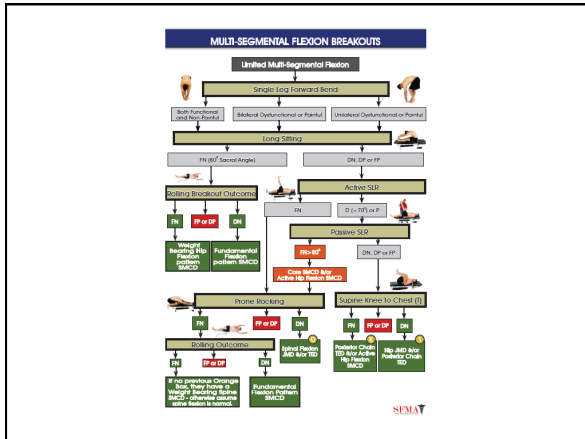
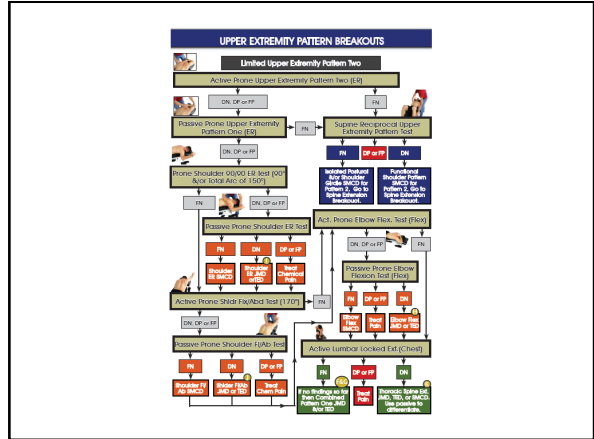
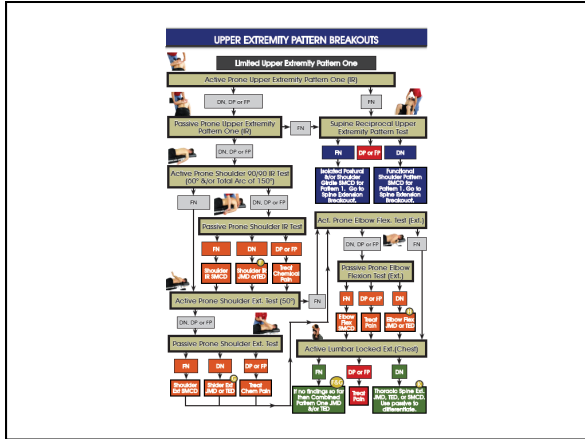
Avoiding Tissue Injury

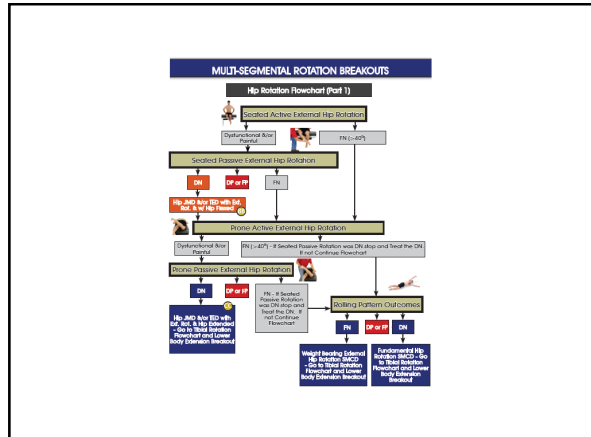
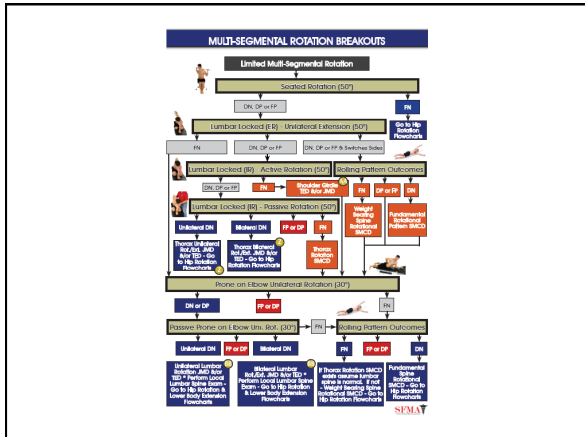
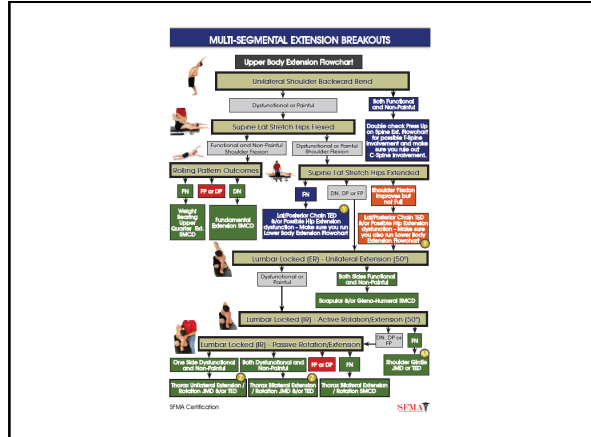
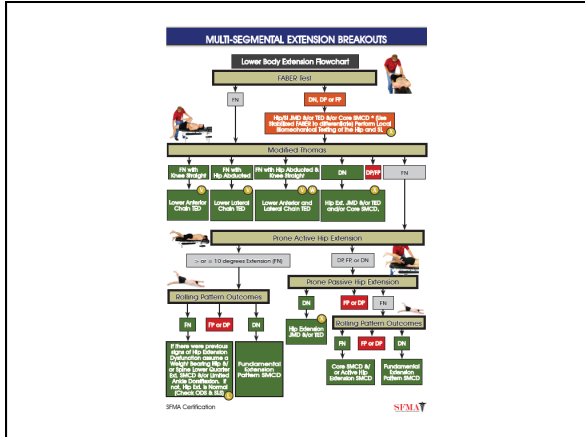
- Soft contact
- Start with longitudinal direction
- Active motion when possible
- Patient tolerance
- Tissue tolerance
- Lymphatic and venous flow
- Treatment frequency

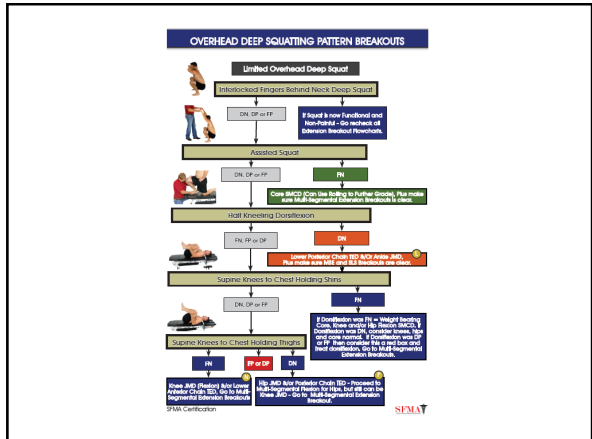
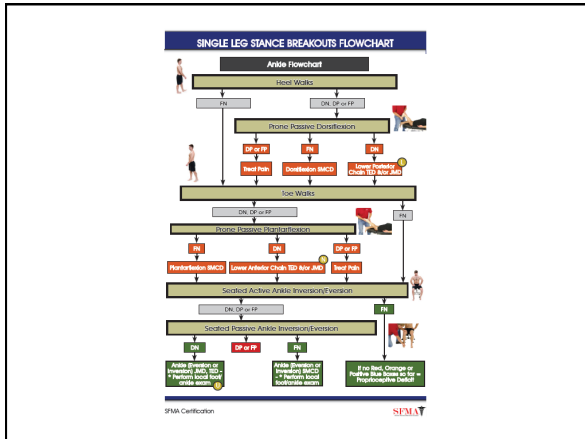
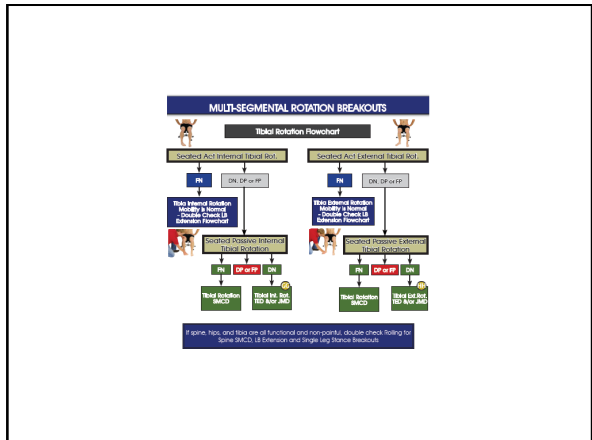
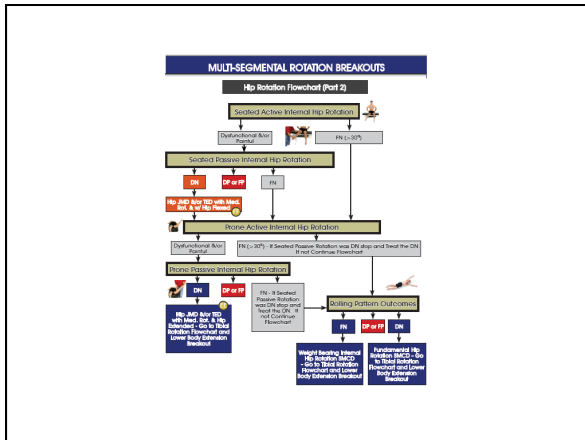
Maximizing Treatment Effectiveness

- Use tension and minimal compression
- Finish patient motion and contact tension
- Use internal vs external glide (penetrate through skin to proper structure then draw tension)









SFMA-APT CORRELATIONS (teaching order)			
CERVICAL SPINE		DEEP SQUAT	
A flexor/s, longus/s, spinals, splinus, interspinous, semispinalis, multifidus, rotator/s, cervical articulations. APT 90, 91	L gastrocnemius, soleus, flexor hallucis longus, flexor digitorum longus, tibialis posterior, posterior lateral ligaments, tarsal extension. APT 60-65	M trapezius, quadriceps, patellar tendon, knee capsule. APT 73, 75, 75	
B rectus capitis posterior, superior oblique/rectus major, occiput C2/C3 articulations. APT 88, 90, 91, 92	P hamstrings and/or gastrocnemius, capsule, long tract, sciatic nerve. APT 66, 76, 90-93	MULTI-SEGMENTAL FLEXION	
C longus colli capitis, SCM, platysma, rectus capitis lateralis anterior, cervical articulations. APT 92	Q gluteus max, medius, minimus, gemelli, piriformis, obturator externus, quadratus femoris, capsule, long tract, sciatic nerve. APT 78-80	SINGLE LEG STANCE	
D rotator/multifidus/semispinalis, intertransverse, C2-T1 articulations. APT 87	N tibialis anterior, extensor digitorum longus, extensor hallucis longus, extensor retinacule with extensor, anterior talar ligaments. APT 57-59	R all talar ligaments, peroneus longus, brevis, tertius, tibialis anterior, tibialis posterior.	
E rectus capitis posterior, superior & inferior oblique, rectus capitis lateralis, occiput C1-2 articulations. APT 89			
UPPER EXTREMITY			
F infraspinatus, teres minor, capsule. APT 34, 36			
G deltoid, capsule, biceps, coracobrachialis, coracoclavicular ligaments, APT biceps without, check with elbow flexed, if OK then biceps. APT 28-33			
H triceps, anconeus, capsule. APT 24			
I latissimus dorsi, teres major, capsule, subscapularis, pectoralis major. APT 29-33, 36			
J latissimus dorsi, teres minor & major, subscapularis, capsule, triceps, infraspinatus, deltoid. APT 35, 37-39, 41-43, 46, 47			
K facet, capsule, intercostals, longitudinal ligaments contracture. APT 86, 87, 88			

MULTI-SEGMENTAL EXTENSION		MULTI-SEGMENTAL ROTATION	
S rectus femoris. APT 71-73, 74, 75	T tensor fascia latae, iliowastus lateralis, gluteus medius/minimus. APT 73, 77	Z anterior gluteus medius/minimus, hip capsule, pectineus, obturator externus. APT 76, 77	
U hip capsule, pectineus, obturator externus, adductors, gracilis, femoral sheath, psoas, iliopsoas, psoas with intertransverse, sacral ligaments. APT 76, 77, 85	V triceps + coracob, deltoid w/infraspinatus, capsule w/infraspinatus, capsule, latissimus dorsi, deltoid, teres minor/major, infraspinatus, latissimus dorsi w/teres minor anterior, shoulder w/ trapezius. APT 34, 36, 42, 46	AA gluteus max, medius/minimus, hip capsule, piriformis, obturator internus. APT 73-80	BB anterior gluteus medius/minimus, hip capsule, quadratus femoris. APT 77, 80
W facet capsules (both sides), ipsilateral external oblique, contralateral internal oblique, rectus abdominus, inferior costovertebral, intertransverse. APT 86-87, 88	X capsule, pectoralis minor and major, deltoid, coracoclavicular ligaments, subclavius, serratus anterior, pectoralis major with deltoid, coracobrachialis. APT 29-33, 48, 51-53, 44, 45, 46, 47	CC trapezius, capsule, biceps femoris. APT 66	DD trapezius, capsule, propleus, rhomboid/obturatoris, semitendinosus. APT 65, 66
Y facet capsules (both sides), ipsilateral rotator/s/multifidus/semispinalis, intercostals, ipsilateral external oblique, contralateral internal oblique, lesser costovertebral, intertransverse quadrate, hamstrings, iliofemoral ligaments. APT 81-85			

