THE MOST COMMONLY OVERLOOKED TREATMENT FOR WHIPLASH AND LOW BACK PAIN

Carl T. Amodio, DC, DIBAK
OBJECTIVE

This presentation is designed to give the doctor a technique to help treat and eliminate whiplash and low back pain within minutes by addressing the most commonly over-looked lesion-

“THE INJURY PATTERN”
OVERVIEW

✓ THE MANUAL MUSCLE TEST
✓ TLR REFLEX PATTERNS
✓ “THE INJURY PATTERN”
✓ HOW TO CHECK FOR THE ENCODED TRAUMA IN THE NERVOUS SYSTEM
✓ THE MOST COMMON LOW BACK AND WHIPLASH LESION
✓ ELIMINATING THE INJURY PATTERN WITH INJURY RECALL TECHNIQUE
William M. Harris, D.C., a member of the Life University Board of Trustees and one of the most prominent and loved figures in the chiropractic profession, died on Nov. 9 at his home in Georgia.

One of the highlights of his career was the founding of his non-profit foundation, the Foundation for the Advancement of Chiropractic Education. The organization has given more than $11 million to chiropractic research and colleges. There are buildings bearing Harris' name in Pasadena, Texas, St. Louis, Missouri, Davenport, Iowa, and in Bloomington, Minn., where the just completed Wolfe-Harris Center for Excellence.

In 2004, Harris played a critical part in the restructuring and rebuilding of Life University when the school was on the verge of losing its accreditation. His foundation provided the necessary funding to attract and retain the new president and executive staff of Life, as well as the student population. Harris' leadership on the Board of Trustees of Life University helped ensure the ongoing growth and financial stability of the institution.

In honor of Harris' life, Life University held a profession-wide memorial service on its campus. Memorials can be made to Eagle Ranch, P. O. Box 7200, Chestnut Mountain, GA 30502.
In Loving Memory

William M. Harris, D.C.
July 28, 1918 - November 9, 2008

Red berets were passed out and worn at recent memorial service in honor of Doctor William Harris. Photo: Guy D’Alema & LU Dept. of Photography/Video Productions.

The Man in the Red Beret
“Dr. Harris' investment in chiropractic research has already brought about scientific journal publications and presentations. It has assisted in building bridges with other research centers. It has brought federal grants into chiropractic research and continues to produce new publications and presentations, stimulate new interest in chiropractic research, and will certainly spin off future chiropractic-based research studies. Dr. Harris' generosity has given growth to a tidal wave in chiropractic research. It is a gift that will keep on giving.

Dr. William Harris, we thank you for your dedication and commitment to the future of chiropractic.”

George McClelland, DC
President, FCE
WHAT IS APPLIED KINESIOLOGY?
What is AK?

http://youtu.be/oqClvgKHZhk
... is a system which evaluates our structural, chemical, and mental aspects. It employs muscle testing with other standard methods of diagnosis. Nutrition, manipulation, diet, acupressure, exercise, and education are used therapeutically to help restore balance and maintain well being throughout life.
OVERVIEW

✓ THE MANUAL MUSCLE TEST

✓ TLR REFLEX PATTERNS

✓ “THE INJURY PATTERN”

✓ HOW TO CHECK FOR THE ENCODED TRAUMA IN THE NERVOUS SYSTEM

✓ THE MOST COMMON LOW BACK AND WHIPLASH LESION

✓ ELIMINATING THE INJURY PATTERN WITH INJURY RECALL TECHNIQUE
THE INJURY PATTERN

HOW DO WE FIND THE INJURY PATTERN?

BASIC MUSCLE TESTING
THE MUSCLE TEST

✓ **ISOLATE MUSCLE**

✓ **AVOID RECRUITMENT**

✓ **USE CONSISTENT PRESSURE AND TIMING**

✓ **AVOID PRECONCEIVED RESULTS OF THE TEST**
THE MUSCLE TEST

✓ BE CAREFUL OF BONY PROMINENCES OR PAINFUL CONTACTS

✓ USE PROPER STABILIZATION & DIRECTION OF FORCE (TEST MUSCLE IS PRIME MOVER)

✓ BE AWARE OF CONTRAINDICATIONS (AGE, DISEASE, ACUTE PAIN, LOCAL PATHOLOGY, INFLAMMATION, ETC.)
...is a system which evaluates our structural, chemical, and mental aspects. It employs muscle testing with other standard methods of diagnosis. Nutrition, manipulation, diet, acupressure, exercise, and education are used therapeutically to help restore balance and maintain well being throughout life.
DISCOVERY

DISCOVERY OF AK
1964
DR. GEORGE GOODHEART
DR. GEORGE GOODHEART & THE OLYMPICS

FIRST USOC TEAM CHIROPRACTOR

APPOINTED BY THE UNITED STATES OLYMPIC COMMITTEE COMMISSION ON SPORTS MEDICINE MODALITIES IN 1980

SERVED AT LAKE PLACID WINTER OLYMPIC GAMES, 1980
INTERNATIONAL COLLEGE OF APPLIED KINESIOLOGY

- STARTED AS GOODHEART STUDY GROUP LEADERS IN 1973
- THE “DIRTY DOZEN”
- OFFICIALLY FORMED IN 1975
- INTERNATIONAL CHAPTERS IN 1980s & 90s
- WORLDWIDE MULTIDISCIPLINARY ORGANIZATION
“MUSCLES MOVE BONES…
…BONES DO NOT MOVE MUSCLES”

GEORGE J. GOODHEART, D.C.
August 18, 1918 – March 5, 2008

FOUNDER AND PRIMARY INVESTIGATOR
OF APPLIED KINESIOLOGY
“MUSCLE TESTING IS AN IMPORTANT TOOL IN THE DECISION MAKING PROCESS OF WHAT TO DO FOR A PATIENT WHEN CONFRONTED WITH A NUMBER OF DIFFERENT ALTERNATIVES.”

-Walter H. Schmitt, DC, DIBAK, DABCN
THE INJURY PATTERN

HOW DO WE FIND **THE INJURY PATTERN**?

**BASIC MUSCLE TESTING**
Does anybody have any low back pain?
In Latin: (“widest part of the back”)

**Origin:** Aponeurosis (lumbosacral fascia) from SPs of sacrum to T-6 & post ½ of iliac crest; also sometimes from lower 3-4 ribs and inferior of scapula (next to Teres Major)

**Insertion:** Floor of bicipital groove (narrowed to about 1½ inches wide to a ribbon-like tendon)

**Function:** Extends, medial rotates, and adducts humerus
Latissimus Dorsi
Latissimus Dorsi

extension, adduction and medial rotation of the arm
LATISSIMUS DORSI-SUPINE TEST
LATISSIMUS DORSI- STANDING TEST
LATISSIMUS DORSI- STANDING TEST
(ALTERNATE DOCTOR POSITION)
DEMO

LATISSIMUS DORSI

MUSCLE TEST
① MUSCLE TEST LATISSIMUS DORSI BILATERALLY IN STANDING POSITION

② DOCTOR AND PATIENT SWITCH

③ RECORD RESULTS
FUNCTIONAL ASSESSMENT

- MANUAL MUSCLE TESTING AS FUNCTIONAL NEUROLOGICAL EVALUATION
- POSTURAL ANALYSIS
- RANGE OF MOTION
- STATIC PALPATION
- GAIT (ORGANIZED MOTION) ANALYSIS
Chiropractic (ki”ro-prak’tik) [chiro- Gr. prassein to do]

a science of applied neurophysiologic diagnosis based on the theory that health and disease are life processes related to the function of the nervous system: irritation of the nervous system by mechanical, chemical, or psychic factors is the cause of disease; restoration and maintenance of health depend on normal function of the nervous system. Diagnosis is the identification of these noxious irritants and treatment is their removal by the most conservative method.

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WHAT WE DO IN APPLIED KINESIOLOGY IS....

SENSORY RECEPTOR BASED THERAPIES
SENSORY RECEPTORS

SENSORY RECEPTOR BASED

DIAGNOSTIC CHALLENGES

DETERMINE

MUSCLE TESTING OUTCOMES
APPLIED KINESIOLOGY IS:

FUNCTIONAL BIOMECHANICAL
AND NEUROLOGICAL EVALUATION
USED IN CONJUNCTION WITH:

• STANDARD METHODS OF DIAGNOSIS
• CLINICAL HISTORY
• PHYSICAL EXAM FINDINGS
• LAB TESTS
• INSTRUMENTATION
APPLIED KINESIOLOGY IS:

FUNCTIONAL BIOMECHANICAL

AND NEUROLOGICAL EVALUATION
FUNCTIONAL ASSESSMENT

- Manual Muscle Testing as Functional Neurological Evaluation
- Postural Analysis
- Range of Motion
- Static Palpation
- Gait (Organized Motion) Analysis
DEMO

RANGE OF MOTION

POSTURAL ANALYSIS
FUNCTIONAL BIOMECHANICAL EVALUATION WORKSHOP

RANGE OF MOTION

1) FLEX FORWARD TO TOUCH TOES AND NOTE DISTANCE FROM FLOOR

2) OBSERVE AMOUNT OF EXTENSION

3) MEASURE SIDE TO SIDE LATERAL FLEXION FOR SYMMETRY

4) CHECK FOR SUBJECTIVE PAIN IN ALL POSITIONS

5) RECORD RESULTS
WORKSHOP (CONT.)

POSTURAL ANALYSIS

OCCIPUT

SHOULDERS

HIPS

A-P OR LAT SWAY/ROTATION
POSTURE DEPENDS ON 3 FACTORS:

1. PROPRIOCEPTION FROM THE FOOT AND ANKLE
2. VISUAL FEEDBACK
3. VESTIBULAR FEEDBACK (LABYRINTHINE-MIDDLE EAR)
FUNCTIONAL ASSESSMENT

- MANUAL MUSCLE TESTING AS FUNCTIONAL NEUROLOGICAL EVALUATION
- POSTURAL ANALYSIS
- RANGE OF MOTION
- STATIC PALPATION
- GAIT (ORGANIZED MOTION) ANALYSIS
ALL MUSCLE SPINDLES AND JOINT RECEPTORS

PROJECT TO THE CEREBELLUM
1) GENERAL PROPRIOCEPTION & FEEDBACK FROM MECHANORECEPTORS (ESPECIALLY CERVICAL)

2) VISUAL FEEDBACK

3) VESTIBULAR FEEDBACK (LABYRINTHINE-MIDDLE EAR)
TONIC LABYRINTHINE REFLEXES

INBORN POSTURAL CONTROL

HEAD POSITION IN RELATION TO GRAVITY
Tonic labyrinthine reflex

Extensors should never be weak in the supine, standing, or seated position.

Flexors should never be weak prone.
TONIC LABYRINTHINE REFLEXES

- HEAD FACING DOWN (PRONE) - ALL FLEXORS FACILITATED.
- HEAD FACING UP (SUPINE) - ALL EXTENSORS FACILITATED.
- HEAD SIDEWAYS WITH THE RIGHT EAR DOWN - RIGHT EXTENSORS AND LEFT FLEXORS FACILITATED.
- HEAD SIDEWAYS WITH THE LEFT EAR DOWN - LEFT EXTENSORS AND RIGHT FLEXORS FACILITATED.
TLR RULES

EXTENDORS SHOULD NEVER BE WEAK SUPINE

FLEXORS SHOULD NEVER BE WEAK PRONE
TLR RULES

THEREFORE, WHEN MUSCLE TESTING EXTENSORS SUPINE, SITTING, OR UPRIGHT... IF YOU DO NOT OVERRIDE THE TLR REFLEX, YOU WILL GET A FALSE POSITIVE 30-40% OF THE TIME!
WE CAN TEMPORARILY SUPERCEDE THE TLR REFLEX IN ORDER TO AVOID FALSE POSITIVE MUSCLE TESTS BY:

HAVING THE PATIENT CLENCH THEIR TEETH TOGETHER LIGHTLY...WHILE MUSCLE TESTING
TESTING EXTENSORS

THEREFORE...WHEN TESTING EXTENSORS (I.E. LATS) WHEN THE PATIENT IS SUPINE, SITTING, OR STANDING... HAVE THE PATIENT...

CLENCH THEIR TEETH TOGETHER LIGHTLY TO TEMPORARILY SUPERCEDE TLR
TONIC LABYRINTHINE REFLEXES

SO...

IF AN ABNORMALLY INHIBITED LATISSIMUS DORSI REMAINS IN THAT STATE WHEN THE PATIENT IS SUPINE, SEATED, OR STANDING...

THIS USUALLY INDICATES NEUROLOGICAL DYSFUNCTION.
WORKSHOP

1) RETEST FACILITATED LATTISSIMUS DORSI FROM EARLIER WORKSHOP WHILE CLENCHING TEETH LIGHTLY TOGETHER

2) ANY CHANGE IN FINDINGS?
POSTURE DEPENDS ON 3 FACTORS:

1. PROPRIORCEPTION FROM THE FOOT AND ANKLE
2. VISUAL FEEDBACK
3. VESTIBULAR FEEDBACK (LABYRINTHINE-MIDDLE EAR)
FUNCTIONAL ASSESSMENT

- MANUAL MUSCLE TESTING AS FUNCTIONAL NEUROLOGICAL EVALUATION
- POSTURAL ANALYSIS
- RANGE OF MOTION
- STATIC PALPATION
- GAIT (ORGANIZED MOTION) ANALYSIS
DEMO

GAIT ASSESSMENT
APPLIED KINESIOLOGY IS:

FUNCTIONAL BIOMECHANICAL
AND NEUROLOGICAL EVALUATION
GAIT ANALYSIS

1) TEST RIGHT LATISSIMUS STANDING WITH TEETH LIGHTLY CLENCHED

2) TEST RIGHT LATISSIMUS WITH RIGHT LEG BACKWARD/LEFT FOOT FORWARD GAIT (WITH TEETH LIGHTLY CLENCHED)

3) RECORD RESULTS
FUNCTIONAL NEUROLOGICAL EVALUATION WORKSHOP #2

ROMBERG’S TEST

1) STAND WITH BOTH FEET ON THE GROUND AND EYES OPEN (CHECK FOR LATERAL AND A/P SWAY) - THEN CHECK WITH EYES CLOSED

2) STAND WITH ONE LEG RAISED TO KNEE LEVEL WITH EYES OPEN (CHECK BOTH SIDES)

3) STAND WITH ONE LEG RAISED AND EYES CLOSED (CHECK BOTH LEGS)

4) RECORD RESULTS (20 SECONDS MIN. TO PASS)
FUNCTIONAL ASSESSMENT

- Manual Muscle Testing as Functional Neurological Evaluation
- Postural Analysis
- Range of Motion
- Static Palpation
- Gait (Organized Motion) Analysis
“A.K. IS AN INTERDISCIPLINARY APPROACH TO HEALTH CARE WHICH DRAWS TOGETHER THE CORE ELEMENTS OF THE COMPLEMENTARY THERAPIES, CREATING A MORE UNIFIED APPROACH TO THE DIAGNOSIS AND TREATMENT OF FUNCTIONAL ILLNESS.”

ICAK status statement, 2009 proceedings manual, p. xvii
<table>
<thead>
<tr>
<th>THE BODY HEALS ITSELF IF WE</th>
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<tbody>
<tr>
<td><strong>REMOVE OBSTACLES</strong></td>
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<tr>
<td><strong>TOO MUCH</strong></td>
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<tr>
<td><strong>FACILITATION</strong></td>
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OVERVIEW

✓ THE MANUAL MUSCLE TEST
✓ TLR REFLEX PATTERNS
✓ THE INJURY PATTERN
✓ HOW TO CHECK FOR THE ENCODED TRAUMA IN THE NERVOUS SYSTEM
✓ THE MOST COMMON LOW BACK AND WHIPLASH LESION
✓ ELIMINATING THE INJURY PATTERN WITH INJURY RECALL TECHNIQUE
What are injury patterns of the body and how do they manifest themselves?

Injury patterns can cause LIGAMENTOUS OR MUSCULAR lesions, which left uncorrected, can contribute to...

NEUROLOGICAL DYSFUNCTION
INJURY LESIONS

If these lesions are left uncorrected...

NORMAL GAIT FUNCTION IS UNLIKELY

Enabling proper gait function with normal facilitation and inhibition expression is ESSENTIAL...

for optimal neurology and health!
INJURY RECALL TECHNIQUE

Walter H. Schmitt, DC, DIBAK, DABCN

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MUSCLE CHAIN RESPONSE

Robert Crotty, DPM
Okmulgee, OK

Gordon Bronston, DPM
Lathrup Village, MI

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INJURY RECALL TECHNIQUE (IRT)

HISTORY

DR. WALTER SCHMITT BECAME AWARE OF THIS TECHNIQUE FROM THE WORK OF ROBERT P. CROTTPY, D.P.M.

INITIAL INVESTIGATION WAS DIRECTED TOWARD THE FOOT AND ANKLE BECAUSE OF THE PODIATRIC BEGINNINGS.
INJURY RECALL TECHNIQUE (IRT)

THE PODIATRIC VIEW IS THAT ALMOST EVERY INJURY OF SIGNIFICANCE IN A PATIENT’S HISTORY IS:

REFLECTED IN THE PATIENT’S FOOT OR FEET, USUALLY IPSILATERAL TO THE INJURY.
THE ANKLE IS RELATED TO TRAUMA BY THE WITHDRAWAL REFLEX, MEDIATED THROUGH THE FLEXOR REFLEX AFFERENTS (FRA’S) AND THE ASSOCIATED CROSSED EXTENSOR REFLEX.
Function of Crossed Extensor Reflex

1. About to step with right leg
2. Right foot steps on tack
3. Right leg begins to flex, while left leg begins to extend
4. Right leg is flexed, left leg is extended
5. Only afterward do you notice the pain!

Big tack!
FLEXOR WITHDRAWAL REFLEX

Step on Tack → Sensory Signal to Spine → Via Interneurons →
Ipsilateral Extensors Inhibited
Ipsilateral Flexors Contract → Leg Lifts
Contralateral Extensors Contract
Contralateral Flexors Inhibited → Maintain Balance and Support Weight
POSTURE DEPENDS ON 3 FACTORS:

1. **PROPRIOCEPTION FROM THE FOOT AND ANKLE**

2. **VISUAL FEEDBACK**

3. **VESTIBULAR FEEDBACK (LABYRINTHINE-MIDDLE EAR)**
THE TERM:

“WITHDRAWAL REFLEX”

IS ADOPTED TO COVER BOTH
THE FLEXION AND
EXTENSION ASSOCIATED
WITH THE TRAUMA TO THE
BODY.
OVERVIEW

✓ THE MANUAL MUSCLE TEST
✓ TLR REFLEX PATTERNS
✓ THE INJURY PATTERN
✓ HOW TO CHECK FOR THE ENCODED TRAUMA IN THE NERVOUS SYSTEM
✓ THE MOST COMMON LOW BACK AND WHIPLASH LESION
✓ ELIMINATING THE INJURY PATTERN WITH INJURY RECALL TECHNIQUE
IRT - OBJECTIVE

✓ TO ELIMINATE THE “ENCODED” TRAUMA CONNECTION IN THE NERVOUS SYSTEM...
   HOW?

✓ BY NEUROLOGICALLY CONNECTING:
   THE AREA OF TRAUMA WITH THE “LOCKING MECHANISM” (I.E. THE ANKLE MORTISE)
MORTISE JOINT
TALUS

Superior view

Lateral view
TALUS

Lateral view with ligaments

Lateral view with tendons
HOW TO DETERMINE IF THERE IS AN INJURY PATTERN:

1) HAVE THE PATIENT TOUCH OVER THE AREA OF SUSPECTED INJURY...

2) WHILE THE DOCTOR CHALLENGES THE ANKLE MORTISE WITH CEPHALAD PRESSURE ON THE TALUS (IPSILATERAL TO THE SIDE OF THE TRAUMA)
THE INDICATOR MUSCLE WILL WEAKEN IF THERE IS AN INJURY!
DR. SCHMITT DISCOVERED THAT SIMULTANEOUS COMPRESSION OF THE ANKLE MORTISE ...

AND... STIMULATION TO A PREVIOUSLY INJURED AREA BY EITHER THE PATIENT TOUCHING THE AREA... OR BY THE DOCTOR RUBBING AND/OR PINCHING THE AREA...

CAUSES A STRONG MUSCLE TO WEAKEN...

AND THEREFORE...

CONFIRMS THE ENCODED TRAUMA OF THE INJURY IN THE BODY AND THE NEED FOR IRT
TALUS CHALLENGE
TALUS CHALLENGE
INJURY RECALL TECHNIQUE

ELIMINATES THE “ENCODED” TRAUMA CONNECTION IN THE NERVOUS SYSTEM...
LOW BACK PAIN?

WHAT ARE THE MOST COMMONLY OVERLOOKED LESIONS FOR LOW BACK PAIN?

INJURIES TO:

☑ THE ILIOLUMBAR LIGAMENTS
☑ SACROTUBEROUS LIGAMENTS
☑ SACROSPINOUS LIGAMENTS
ILIOLUMBAR LIGAMENTS
ILIOLUMBAR LIGAMENT
ILIOLUMBAR LIGAMENT FROM THE FRONT

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ILIOLUMBAR LIGAMENT
FROM THE BACK

© 2010 Walter H. Schmitt
SACROTUBEREOUS LIGAMENTS
SACROTUBEROUS LIGAMENTS
SACROSPINOUS LIGAMENTS
SACROSPINOUS LIGAMENTS
SACROSPINOUS LIGAMENTS
DEMO

INJURY RECALL TECHNIQUE

SCREENING PROCEDURE
IRT TREATMENT

STIMULATE

THE SKIN OVER THE AREA OF TRAUMA BY EITHER:

A) PATIENT TOUCHING OR...

B) DOCTOR PINCHING (AND/OR RUBBING) THE AREA
IRT TREATMENT

SEPARATE

THE ANKLE MORTISE

BY “MICROMANIPULATION” (THIS IS A GENTLE, FLIPPING ACTION, WITH MOST OF THE FORCE APPLIED TO THE ANTERIOR SUPERIOR SURFACE OF THE TALUS, BRINGING IT INFERIOR).

THIS IS NOT A CHIROPRACTIC ADJUSTMENT OF THE TALUS!
TALUS

FROM FRONT

FROM BACK

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IRT CORRECTION
IRT CORRECTION: TALUS MICROMANIPULATION

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IRT CORRECTION – ERROR
TOO MUCH MANIPULATION

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Does anybody have any low back pain?
1) PUSH TALUS HEADWARD WHILE:
   A. PATIENT TOUCHES AREA OF INJURY, OR
   B. DOCTOR PINCHES AREA

2) IF STRONG MUSCLE (i.e. LAT) WEAKENS:
   PERFORM IRT BY MICROMANIPULATION (DISTRACTION OF TALUS)

3) RECHECK

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① TEST LATISSIMUS MUSCLE

② HAVE PATIENT TOUCH OVER THEIR ILIOLUMBAR, SACROSPINOUS, AND SACROTUBEROUS LIGAMENTS

③ CHALLENGE IPSILATERAL TALUS CEPHALAD

④ RE-CHECK LATISSIMUS

⑤ IS THERE AN INJURY PATTERN?
① CORRECT INJURY PATTERN IF IT SHOWED IN THE PREVIOUS WORKSHOP WITH IRT AT THE IPSILATERAL ANKLE MORTISE JOINT

② RE-CHALLENGE TALUS WITH CEPHALAD PRESSURE (PLANTAR FLEXION), WHILE PATIENT IS TOUCHING THE ILIOLUMBAR LIGAMENT

③ IF MUSCLE (i.e. LAT) STAYS STRONG, YOU HAVE CORRECTED THE INJURY PATTERN! IF MUSCLE WEAKENS AGAIN WITH CHALLENGE, RE-DO IRT
THE FIRST TECHNIQUE THAT WAS USED IN AK TO CHANGE MUSCLE FUNCTION

WHEN MUSCLE WEAKNESS IS FOUND, SOMETIMES THERE ARE TENDER NODULES AT THE ORIGIN AND INSERTION

WHEN THE NODULES ARE DEEPLY MASSAGED, THE MUSCLE USUALLY RETURNS TO NORMAL STRENGTH WITH LASTING RESULTS
ORIGIN AND INSERTION

✓ O/I IS A VIABLE THERAPEUTIC APPROACH
✓ IT IS APPLICABLE WHEN NODULES ARE PRESENT
✓ THERE WILL USUALLY BE A HISTORY OF TRAUMA TO THE AREA
✓ DR. GOODHEART HYPOTHESIZED THAT THE WEAKNESS WAS DUE TO A MICRO-AVULSION OF THE TENDON FROM THE PERIOSTEUM
ORIGIN AND INSERTION PROCEDURE

① FEEL FOR TENDER NODULES AT THE ORIGIN AND THE INSERTION OF THE MUSCLE (THE MUSCLE WILL USUALLY BE WEAK DUE TO INJURY)

② RUB THE NODULES IN A CIRCULAR MOTION UNTIL YOU NO LONGER FEEL THEM (THE MUSCLE WILL STRENGTHEN IF YOU PERFORM THE PROCEDURE LONG ENOUGH AND WITH SUFFICIENT PRESSURE TO ALLOW A RE-ATTACHMENT OF THE MUSCULO-TENDINOUS INSERTION AT THE PERIOSTEUM)
INJURY PATTERN TREATMENT

SO...FOR OPTIMAL RESULTS:

DO IRT COMBINED WITH

ORIGIN/INSERTION TECHNIQUE!
DEMO

INJURY RECALL TECHNIQUE

COMBINED WITH...

ORIGIN AND INSERTION TECHNIQUE
QUINTESSENTIAL APPLICATIONS
WHAT TO DO FIRST, NEXT, AND LAST...

Walter H. Schmitt, DC, DIBAK, DABCN
&
Kerry McCord, DC, DIBAK
TREATING SOFT TISSUE INJURIES OF THE CERVICAL SPINE
AK RULES
NECK FLEXOR WEAKNESS IN WHIPLASH INJURIES

- TYPICAL FINDING IN WHIPLASH
- USUALLY NEEDS ORIGIN/INSERTION-IRT
- (USUALLY) INDICATES AN INTERNAL OR EXTERNAL FRONTAL BONE CRANIAL FAULT
TREATING SOFT TISSUE INJURIES - CERVICAL SPINE

✓ OI – IRT
   ALL CERVICAL MUSCLES

✓ FRONTAL BONE FAULT
   USUALLY MECHANICAL CORRECTION

✓ TMJ CORRECTIONS

✓ MANGANESE / BONE PREPARATIONS
STERNOCLIDEOMASTOID ORIGIN INSERTION
STERNOCLEIDOMASTOID
STERNOCLEIDOMASTOID

S Origin: Sternum: anterior manubrium; Clavicle: upper surface of medial half

S Insertion: Lateral mastoid process; lateral ½ of superior nuchal line

S Function: Bilateral function: flexes head, accessory respiratory muscle; Unilateral: rotates head to opposite side, pulls head towards ipsilateral shoulder
WEAK LEFT SCM POSTURE
BILATERAL SCM WEAKNESS
MILITARY NECK
GENERAL NECK FLEXORS – TEST

ARMS UP

ARMS AT SIDES
STERNOCLEIDOMASTOID – TEST
ARMS AT SIDES
R-SternoCLEIDOMASTOID – TEST

ARMS UP

ARMS AT SIDES
L- STERNOCLEIDOMASTOID – TEST

ARMS UP                  ARMS AT SIDES
MEDIAL NECK FLEXORS

SCALENEUS ANTERIOR
  Origin: ANT TPs C-2 to C-6
  Insertion: UPPER RIB 1

SCALENEUS MEDIUS
  Origin: POST TPs C-2 TO C-7
  Insertion: UPPER RIB 1

SCALENEUS POSTERIOR
  Origin: POST TPs C-4,5,6
  Insertion: OUTER RIB 2

Functions: Bilateral function: flexes head and neck, accessory respiratory muscle

Unilateral: rotates head and neck to opposite side
SCALENIUS ANTERIOR
SCALENEUS ANTERIOR
Origin: ANT TPs C-2 to C-6
Insertion: UPPER RIB 1

SCALENEUS MEDIUS
Origin: POST TPs C-2 TO C-7
Insertion: UPPER RIB 1

SCALENEUS POSTERIOR
Origin: POST TPs C-4,5,6
Insertion: OUTER RIB 2

Functions: Bilateral function: flexes head and neck, accessory respiratory muscle

Unilateral: rotates head and neck to opposite side
SCALENES

ANTERIOR

MEDIUS
SCALENEUS ANTERIOR
  Origin: ANT TPs C-2 to C-6
  Insertion: UPPER RIB 1

SCALENEUS MEDIUS
  Origin: POST TPs C-2 TO C-7
  Insertion: UPPER RIB 1

SCALENEUS POSTERIOR
  Origin: POST TPs C-4,5,6
  Insertion: OUTER RIB 2

Functions: Bilateral function: flexes head and neck, accessory respiratory muscle

Unilateral: rotates head and neck to opposite side
LONGUS CAPITUS

**Origin**: ANT TPs C-3 to C-6  **Insertion**: INF BASILAR PORTION OF OCCIPUT

LONGUS COLLI

**Origin**: BODIES T-1,2,3 C-5,6,7  **Insertion**: BODIES C-2,3,4

**Function**: Bilateral function: flexes head and neck, accessory respiratory muscle

**Unilateral**: rotates head and neck to opposite side
WEAK LEFT MEDIAL NECK FLEXORS POSTURE
MEDIAL NECK FLEXORS
ARMS AT SIDES
LEFT MEDIAL NECK FLEXORS
ARMS UP
ARMS AT SIDES
DEMO

GENERAL NECK FLEXORS

MEDIAL NECK FLEXORS

R AND L SCM
IRT FOR HEAD AND NECK INJURIES

① HAVE PATIENT TOUCH OVER AREA OF INJURY IN HEAD OR NECK AREA (ABOVE T1) AND PUT HEAD IN EXTENSION

② IF STRONG MUSCLE (i.e. LATTISSIMUS) WEAKENS… THERE IS AN INJURY PATTERN

③ CORRECT WITH GENTLE ATLANTO-OCCIPITAL FLEXION WHILE THE PATIENT IS TOUCHING OVER THE AREA OF INJURY

④ RECHECK
IRT FOR HEAD AND NECK INJURIES

THIS IS NOT AN OCCIPUT ADJUSTMENT!
IRT FOR HEAD AND NECK INJURIES

DEMO
5 NECK FLEXORS TESTS:
GENERAL NECK FLEXORS
R & L MEDIAL NECK FLEXORS
R & L SCMs
① TREAT EACH OTHER WITH IRT AND/OR ORIGIN AND INSERTION TECHNIQUE IN THE HEAD AND NECK AREA AND ANY OTHER AREA THAT SHOWS UP WHERE YOU FOUND AN INJURY PATTERN

② GO BACK AND CHECK ORIGINAL OBJECTIVE FINDINGS (ROMBERG’S, POSTURE, GAIT, FLEXION/EXTENSION, ETC.) AND SUBJECTIVE FINDINGS (I.E. PAIN) AND NOTE IF THERE ARE ANY CHANGES
THE NEUROLOGICAL HIERARCHY

DOES IT MAKE SENSE NEUROLOGICALLY TO CLEAR ALL INJURY PATTERNS BEFORE ADJUSTING YOUR PATIENTS?

YES!

WWW.QUINTESENTIALAPPLICATIONS.COM
QUESTIONS?
THANK YOU!

www.optimalhealthdoc.com

www.injuryrecall.com

drcarl9@gmail.com