An Osteopathic Approach to the Rotator Cuff Syndrome: A Tale of Two Shoulders An Introduction to the Fascial Distortion Model

Hawaii Association of Osteopathic Physicians and Surgeons Honolulu, Hawaii March 28, 2018

> Byron Perkins, DO, Medical Director, Cornerstone Clinic: Center for Osteopathic Research and Education

Past-President, American FDM Association

©2018 All Rights Reserved



A Warm Alaska Welcome

Shoulder pain

- Every patient with shoulder pain assumes they have injured the rotator cuff.
- Indeed they may have a damaged rotator cuff. But is that the cause of their pain?

Another common syndrome

• Doctors are familiar with this syndrome so it is commonly used to explain a patient's shoulder pain.

Shoulder Pain

- Extensive amount of tissue in this region that can explain a patients pain.
- A lot of interaction with other regions.
- Interconnected fascial planes.

Shoulder Pain

- Extensive layering of the muscles and therefore fascia.
- Looking at an MRI we can see the fascial layers that can be involved.

Rotator Cuff Syndrome

- A common cause of shoulder pain
- Often used NOS as Dx of shoulder pain, but asymptomatic Rotator Cuff tears common
- Diagnosis is difficult by physical exam alone
- Imaging is helpful, but does not always effect treatment or outcome
- Today we will be presenting 2 patients with Rotator Cuff tears and their treatment outcomes

What is Rotator Cuff Syndrome?

- "Rotator Cuff Syndrome" encompasses:
 - Shoulder Impingement Syndrome (SIS)
 - Subacromial Impingement Syndrome
 - Subacromial Bursitis
 - Rotator Cuff Tendonitis
 - Rotator Cuff Tears
 - Partial thickness tears
 - Full thickness tears

2015 ICD-10-CM <u>M75.1</u> Rotator Cuff Tear

- <u>M75.1</u> Rotator cuff tear or rupture, not specified as traumatic
- <u>M75.10</u> Unspecified rotator cuff tear or rupture, not specified as traumatic
- <u>M75.100</u> Unspecified rotator cuff tear or rupture of unspecified shoulder, not specified as traumatic
- <u>M75.101</u> Unspecified rotator cuff tear or rupture of right shoulder, not specified as traumatic
- <u>M75.102</u> Unspecified rotator cuff tear or rupture of left shoulder, not specified as traumatic

2015 ICD-10-CM <u>M75.1</u> Incomplete Rotator Cuff Tear

- <u>M75.11</u> Incomplete rotator cuff tear or rupture not specified as traumatic
- <u>M75.110</u> Incomplete rotator cuff tear or rupture of unspecified shoulder, not specified as traumatic
- <u>M75.111</u> Incomplete rotator cuff tear or rupture of right shoulder, not specified as traumatic
- <u>M75.112</u> Incomplete rotator cuff tear or rupture of left shoulder, not specified as traumatic

2015 ICD-10-CM <u>M75.1</u> Complete Rotator Cuff Tear

- <u>M75.12</u> Complete rotator cuff tear or rupture not specified as traumatic
- <u>M75.120</u> Complete rotator cuff tear or rupture of unspecified shoulder, not specified as traumatic
- <u>M75.121</u> Complete rotator cuff tear or rupture of right shoulder, not specified as traumatic
- <u>M75.122</u> Complete rotator cuff tear or rupture of left shoulder, not specified as traumatic

2015 ICD-10-CM S46.0 Injury of Muscle(s) and Tendon(s)

of the Rotator Cuff of Shoulder

- <u>S46.00</u> Unspecified injury of muscle(s) and tendon(s) of the rotator cuff of right shoulder
 <u>S46.001</u> Unspecified injury of muscle(s) and tendon(s) of the rotator cuff of
 - right shoulder
 - <u>S46.001A</u> initial encounter
 - <u>S46.001D</u> subsequent encounter
 - <u>S46.001S</u> sequela
 - $\underline{S46.002}$ Unspecified injury of muscle(s) and tendon(s) of the rotator cuff of left shoulder
 - <u>S46.002A</u> initial encounter
 - <u>S46.002D</u> subsequent encounter
 - <u>S46.002S</u> sequela

2015 ICD-10-CM

<u>S46.0</u> Injury of Muscle(s) and Tendon(s) of the Rotator Cuff of Shoulder

- <u>S46.01</u> Strainof muscle(s) and tendon(s) of the rotator cuff of right shoulder
 - S46.01 Strain of muscle(s) and tendon(s) of the rotator cuff of right shoulder
 - <u>S46.011A</u> initial encounter
 - <u>S46.011D</u> subsequent encounter
 - <u>S46.011S</u> sequela
 - S46.012 Strain of muscle(s) and tendon(s) of the rotator cuff of left shoulder
 - <u>S46.012A</u> initial encounter
 - <u>S46.012D</u> subsequent encounter
 - <u>S46.012S</u> sequela

Clinical Practice Guidelines on Rotator Cuff Syndrome

- Hopman K, Krahe L, Lukersmith S, McColl AR, VineK. Clinical Practice Guidelines for the Management of Rotator Cuff Syndrome in the Workplace. University of New South Wales; 2013 80p[223 References]
- Diagnostic imaging guidance for musculoskeletal complaints in adults-an evidence based approach. Part 2: Upper Extremity Disorders (2008)
- American Academy of Orthopaedic Surgeons appropriate use criteria for optimizing the management of full-thickness rotator cuff tears. Rosemont, IL American Academy of Orthopaedic Surgeons (AAOS); 2013 Sep 20. 82 P [9 references]

Clinical Practice Guidelines on Rotator Cuff Syndrome

- American Academy of Orthopaedic Surgeons. Optimizing he Management of Rotator Cuff Problems: Guideline and Evidence Report. Rosemont, IL American Academy of Orthopaedic Surgeons (AAOS); 2010 Dec 4. 293 P [118 references]
- AIM Specialty Health. Appropriate use criteria: imaging of the extremities. Chicago (IL): AIM Specialty Health; 2014 May 14. 34 p. [89 references]; National Guideline Clearinghouse

Risk Factors for Rotator Cuff Syndrome

- Age-rare before 40, increasingly prevalent \geq 50, Ave onset 551
- Obesity
- Diabetes
- · Chronic/systemic diseases affecting strength
- Repetitive & over use injuries
- Tobacco use
- Trauma
- Congenital anatomy of the AC Joint

Epidemiology of Rotator Cuff Syndrome

RCS is one of the most common presenting CO in Primary Care

Prevalence in Western general population is estimated to be 7-25% of the adult population $^{\rm 1}$

Annual Incidence-10 cases per 1000

- Peaking at 25/1000 between 42-46 yo
- + In \geq 70 yo, 21% have shoulder symptoms, most attributed to the RCS

Impacts a wide range of patients

- Most patients are ≥ 40 years of age, increasing incidence after 50
- No reported racial variation
- Men more 2/3 more likely to seek consultation than women, but 1:1 ratio

Epidemiology of Rotator Cuff Syndrome

RCS is one of the most common presenting CO in Primary Care

In cadaver studies, incidence of full thickness tears varies from 18-26%

Incidence of partial thickness tears varies from 32-37% after 40 yo In MRI studies, tears observed in 34% of asymptomatic individuals of all ages

After 60 yo, 26% of patients have partial thickness tears After 60 yo, 28% demonstrate full thickness tears

Rotator Cuff Syndrome: Signs & Symptoms

- Pain in the shoulder and upper arm. Pain is felt often at night when lying on the affected shoulder.
- Pain may also be felt when moving the arm in certain ways. The pain stops before the elbow.
- If the injury is acute (sudden) pain will be intense and immediate.
- If the injury is degenerative (damage occurs over time) the pain may be mild at first.
- Weakness or loss of motion in the arm or shoulder.
- A grating or snapping sensation or cracking sound when moving the shoulder.

Medical Author: William C. Shiel Jr., MD, FACP, FACR

Rotator Cuff Syndrome Pathophysiologic Mechanisms

- Controversial, not fully understood, 2 predominant hypothesis:
 Extrinsic Hypothesis: primary insult is repeated impingement
 - of the Rotator Cuff tendon against the glenohumeral joint
 - Anterosuperior impingement syndrome
 - · Posterosuperior impingement syndrome
 - Anterointernal impingement syndrome
 - Intrinsic Hypothesis: primary insult is progressive age-related degeneration of the tendon
- In summary: pathophysiology of rotator cuff degeneration may be explained by a combination of extrinsic, intrinsic, and biomechanical factors1.









Rotator Cuff Syndrome: Differential Diagnosis & Work Up

- H & P-most important consideration
- Lab: CBC, ESR +/- CRP, ?CPK, Vit D 250H; ANA/RA if clinical suspicion of mixed connective tissue disease
- Imaging: plain film, US, MRI, MRA
- Neurologic (EMG) testing: limited value, R/O cervical/brachial referred
- Diagnostic Arthroscopy?
- Differential DX: Consider and R/O Adhesive Capsulitis, RA-other autoimmune disorders, Gout, Osteoarthritis of the Shoulder region, Neoplasms, Fracture

Rotator Cuff Syndrome: Physical Exam

- Inspection/Palpation
- Anterior
 - SC Joint
 - Clavicle
 - AC Joint
 - Shoulder Heights
- Posterior
 - Supraspinatous
 - Infraspinatous
 - Scapular Heights
- Glenohumeral rhythm
 Scapular dyskinesis

Range of Motion

- Painful arc
- External/Internal Rotation

- Physical Exam of the Shoulder
- Muscle Testing
 - Supraspinatous-ABD
 - Infraspinatous-ER
 - Biceps LH-forward FLEX
 - Subscapularis-Lift Off
 - Serratus Anterior-Winging Scapula

Orthopedic Special Tests (OST's) for the Shoulder

Five Categories of Tests

- Impingement
- Rotator Cuff Pathology
- Labral Tears and Biceps Pathology
- AC joint pathology
- Instability

Physical Exam of the Shoulder

- Specific Shoulder Diagnostic Tests
 - Lift off: Subscapularis
 - Jobe's test/Empty Can test: Supraspinatous, Infraspinatous
 - Hornblower's sign: Teres Minor
 - Yergason's /Speed's test: Bicipetal tendonosis,
 - Neer's test/Hawkin's test: Impingement
 - $O'Brien's \ test_2/Apprehension: \ Labrum \ tear/Instability$

Physical Exam of the Shoulder Provocation Tests

- AC Joint Tests
 - Horizontal Flexion
 - Adduction
 - Resisted ABD in horizontal flexion
- Impingement Signs
- Neer's/Hawkin's
- Stability
 - Sulcus testApprehension &
 - Relocation
 - AP Glide
- Labrum – O'brien's

Rotator Cuff Syndrome Imaging Studies

- Plain Radiographs
- Ultrasound
- MRI
- MRI Arthrogram
- CT Arthrogram (if MRI is Contraindicated

Rotator Cuff Syndrome: Treatment Options

- Medication-Oral, topical, intra-articular
- Physical Medicine-Plasma Rich Platelets (PRP)
- Physical Therapy/Rehabilitation
- Osteopathic Manual Medicine
- Surgical instrumentation: Arthroscopy & Open

Rotator Cuff Syndrome: Treatment Options: Surgical

- What options for surgical repair?
 - Three techniques are used for rotator cuff repair:
 - traditional open repair
 - mini-open repair
 - arthroscopic repair.
 - The type of repair performed is based on the findings at surgery.
 - A partial tear may require only a trimming or smoothing procedure: called a débridement.
 - A full-thickness tear within the substance of the tendon can be repaired side to side
 - If the tendon is torn from its insertion on the humerus (most common injury), it is repaired directly to bone.
 - Your orthopedic surgeon can recommend which technique is best

Rotator Cuff Syndrome: Treatment Options: Rehabilitation

- How important is rehabilitation in the treatment of a rotator cuff tear?
 - Rehabilitation plays a critical role in both the nonsurgical and surgical treatment of a rotator cuff tear
 - When a tear occurs, there is frequently atrophy of the muscles around the arm and loss of motion of the shoulder. An exercise or physical therapy program is necessary to regain strength and improve function in the shoulder
 - Even though surgery reasins the defect in the tendon, the muscles around the arm remain weak, and a strong effort at rehabilitation is necessary for the procedure to succeed.
 - Complete rehabilitation after surgery may take several months. Most rotator cuff repairs take **approximately six months** of rehabilitation to regain as full as possible range of motion, shoulder strength and function.

Case Presentation #1: WK

- 19 yo C Male, college football player, bilat shoulder pain x 2 years L >R. Pain in anterior shoulders with Abd/ER of shoulders
- Decreased ROM in Abd to 160 B, and + Hawkins sign on L. No apparent instability on PE
- Recommended by Team physician to consult with Ortho & obtain MRI for probable RC tear.
- FDM : B SCHTP's, B ASTB's, L PSTB, L AACCD

Treatment of Rotator Cuff Syndrome in the FDM:WK

Treatment of Rotator Cuff Syndrome in the FDM:WK F/U

Case Presentation: WK

- Pt had MRI following treatment, and despite favorable outcome from OMT, elected to undergo surgical repair upon the recommendation of his Orthopedist
- Pt was able to continue his college football career for his remaining 3 years of eligibility

MRI Findings: WK

- Traumatic injury to the posterior glenoid with labral disruption & stripping of the posterior joint capsule along the glenoid.
- This likely constitutes a posterior glenoid fracture with associated labral tears and joint capsular stripping.
- Rotator cuff is intact, as is the long head of biceps.
- Humeral head edema & mild joint effusion is noted

Case Presentation #2: MQ

- 52 yo C male boat captain. Hx of R RC tear 1992. Recovered with conservative management. Reinjury 2/2013, with MRI findings positive for RC tear, and recommended surgical repair.
- Presented for OMT to "buy time", to schedule surgery after his busy summer season
- FDM: L SCHTP, L PSTB, L LDTB

MRI Findings: MQ

- Mild type II acromion
- Severe tendinosis supraspinatous with high grade tear peripherally, communicating with acromial surface. Infraspinatous also shows an interstitial tear.
- Subscapularis shows severe tendinosis and probable partial thickness tear as well
- Labrum appears intact

Before & After Treatment of Rotator Cuff Syndrome in the FDM:MQ

Treatment of Rotator Cuff Syndrome in the FDM:MQ

Case Presentation #2:MQ

- Pt had successful outcome, had a full boating season, elected not to schedule surgery as he was not limited in his activities.
- Returned 1 year later with recurrent injury and was retreated in the FDM with similar outcome.

Before & After Treatment of Rotator Cuff Syndrome in the FDM:MQ #2

Rotator Cuff Syndrome: Summary

- Rotator Cuff Syndrome encompasses many orthopedic diagnoses of the Shoulder
- H&P is the cornerstone of diagnosis
- RC tears can be partial or complete
- There are multiple options for treatment of RCS
- Partial tears, older patients > conservative management
- Full thickness tears, younger patients > surgical repair
- Osteopathic Manipulation in the Fascial Distortion Model is a safe and effective Treatment in RCS



What is Fascia?

- Fascia is the soft tissue component of the connective tissue system that permeates the human body.
- It forms a whole-body continuous threedimensional matrix of structural support.
- Fascia interpenetrates and surrounds all organs, muscles, bones and nerve fibers, creating a unique environment for body systems functioning.



Fascia

- A continuous sheet of tissue that extends from the head to the toes.
- Every cell is wrapped with the fascial material.
- The fascia is under tension and supports the internal structures such as bone, ligament, and vessels.
- Fascia is sensory, proprioceptive, supportive, conductive, and contractile.

What is Fascia?

- All fibrous connective tissues including:
- Ligaments
- Tendons
- Retinaculae
- Joint capsules
- Aponueroses

What is Fascia?

- Organ and vessel tunics
- Epineurium
- Meninges
- Periostium
- All the endomysial and intermuscular fibers of the myofascia.



Fascia

- Osteopathic Physicians consider fascia to be an organ system, much like skin
- Fascia communicates what is going on inside the body much like skin does outside the body
- Fascia is neurosensory, has proprioceptive function, and structural/mechanical tensegrity
- Fascia has "memory", the emotional component of an injury is stored in the fascia

A.T. Still "Philosophy of Osteopathy" on fascia

 It being that principle that sheathes, permeates, divides, and subdivides every portion of all animal bodies; surrounding and penetrating every muscle and all its fibers- every artery, and every fiber and principle thereunto belonging

What is a Model?

- A description or analogy used to help visualize something (as an atom) that cannot be directly observed
- A system of postulates, data, and inferences presented as a mathematical description of an entity or state of affairs

Fascial Distortion Model

 Anatomical perspective in which most musculoskeletal injuries and certain medical conditions are envisioned as consisting of one or more of six principal fascial distortion types each of which have signature clinical presentations.

Introduction to the Fascial Distortion Model

- Founded and developed by Stephen Typaldos, DO (UHS-COM 1986) in 1991 until his untimely death in 2006
- Published in AAO Journal 1994 and 1995
- 4th edition Textbook published 2002 FDM: Clinical and Theoretical Application of the Fascial Distortion Model Within the Practice of Medicine and Surgery

Introduction to the Fascial Distortion Model

- Based on simple principles of personal experience and observation
- Patients intuitively know what needs to happen to feel better
- Patients communicate this through consistent verbal and body language
- This system of knowing and communicating is inherent in the Fascia, and is universal.

Universal Body Language

- The concept of a Universal Body Language for pain is not new
- Universal sign of Myocardial Infarction
- Universal sign of Choking
- Universal signs of Stroke
- The study of Body Language and Facial Expression of emotion is well established

Fascial Distortion Model

• In the manipulative practice of the FDM, each injury is envisioned through the model, and the subjective complaints, body language, mechanism of injury, and objective findings are woven together to create a meaningful diagnosis that has practical applications

Fascial Distortion Model

- In the FDM approach, treatment is directed to the specific anatomical distortions of the capsule, ligaments, and surrounding fascia, physically reversing them.
- When the fascial distortions are corrected, the anatomical injury no longer exists, the patient can resume normal function and is pain free.

Fascial Distortion Model

- This model allows for strikingly effective manipulative treatments for diverse, and often difficult to treat conditions such as pulled muscles, sprains, fractures, frozen shoulders, and other soft tissue injuries.
- It is effective in the treatment of other musculoskeletal and neurologic conditions with heretofore limited treatment options.

Results of Treatment in the Fascial Distortion Model

- Immediate
- Measurable
- Objective
- Obvious
- Predictable
- Reproducible

Six Principal Types of Fascial Distortions

- Triggerband
- Herniated Triggerpoint
- Continuum Distortion
- Folding Distortion
- Cylinder Distortion
- Tectonic Fixation

Six Principal Types of Fascial Distortions

- Triggerband: Distorted banded fascial tissue (TB)
- Herniated Triggerpoint: abnormal protrusion of tissue through fascial plane (HTP)
- Continuum Distortion: Alteration of transition zone between ligament, tendon, other connective tissue and bone (CD)
- Folding Distortion: Three dimensional alteration of fascial plane (FD)
- Cylinder Distortion: Overlapping of cylindrical fascial coils (CyD)
- Tectonic Fixation: alteration in ability of fascial surfaces to glide (TF)





Triggerband

- Etiology distorted fascial bands (twisted fascial fibers)
- Body language sweeping motion with fingers along painful linear pathway
- Symptoms burning, pulling
- Tx Triggerband Technique
 - use thumb to untwist the twisted fibers and iron out the wrinkled tissue

Triggerband Technique

 Corrects distorted fascial bands by physical force from physician's thumb

Herniated Triggerpoint

 Abnormal protrusion of tissue through fascial plane

Herniated Triggerpoint

Herniated Triggerpoint

- Etiology protrusion of tissue through fascial plane
- Body language pushes thumb, fingers, or knuckle into protruding tissue
- Symptoms ache between neck & shoulder (SCHTP), aching pain in buttock (bull's eye), flank aching/renal colic (flank HTP)
- Tx Herniated Triggerpoint Therapy – push tissue back through fascial plane

Continuum Distortion

 Alteration of transition zone between ligament, tendon, or other fascia and bone

Continuum Distortion

Continuum Distortion

- Etiology alteration of transition zone between bone and ligament or tendon
- Body language points to *spot of pain* with one finger
- Symptoms hurts in one or more spots
- Tx Continuum Technique
 - apply force with thumb to force transition zone to shift

Continuum Technique

 Force is applied by physician's thumb directly into injured transition zone and held until osseous components are forced to shift

Folding Distortion

• Three-dimensional alteration of fascial plane



Folding Distortion

- Etiology three dimensional alteration of fascial plane
- Body language places hand over affected joint, or pushes fingers into intermuscular septum or interosseous membrane
- Symptoms aches deep in joint or injured folding fascia
- Tx Folding Technique



Unfolding and Refolding Distortions

- Unfolding Subtype of folding distortion in which folding fascia has unfolded contorted, and can't refold completely
- Refolding Subtype of folding distortion in which folding fascia is over-compressed and can't unfold completely

Two Subtypes: Unfolding and Refolding

- Unfolding: pain worsened with compression and lessened with traction
 - Tx: Modified traction with traction/thrust
 - Inversion therapy for stubborn cases
- Refolding: pain worsened with traction and lessened with compression
 - Tx: Modified compression with compression/thrust

Folding Technique

- Modified traction approach which is designed to unfold distorted folding fascia and allow it to refold normally, or
- Modified compression approach which refolds distorted folding fascia and allows it to unfold normally

Cylinder Distortion

 Tangling of cylindrical coils of fascia





Cylinder Distortion

- Etiology tangling of cylindrical coils of fascia
- Body language repetitively squeezes affected body part, sweeping motion with palm over symptomatic area, circle sign/C-sign over affected area
- Symptoms often bizarre; patients have difficulty pinpointing source of pain and pain jumps from one location to another; numbness or paresthesias
- Tx Cylinder Technique
 - Thumbs, hands or suction cups are used to untangle cylindrical coils



Tectonic Fixation

- Etiology inability of fascial surface to glide
- Body language stiff joint movement
- Symptoms stiffness, "feels like it needs to pop"
- Tx Tectonic Technique
 - pump fluid through joint and force fixated surface to slide

Side Effects of FDM Treatments

- Pain/discomfort during treatment
- Erythema of the skin
- Bruising
- Hemorragic petechae
- Rebound tenderness



Side Effects of FDM Treatment





Relative Contraindications*

- · Infectious arthritis
- Open wounds
- Osteomyelitis
- Phlebitis
- Poor doctor/patient rapport
- Pregnancy (treatment of abdomen and pelvis)
- · Previous strokes
- Skin Wounds
- Vascular diseases

Aneurysms

- Arteriosclerosis Bleeding disorders
- Cancer (with boney Metastasis)
- Cellulitis Collagen Vascular Disease
- Edema
- Hematomas
- Infections

*Each physician should use his or her best judgment before employing these (or any other) treatment modalities

32

Hands On

Common Shoulder TB's

- Star Triggerband (Star TB)
- AC-Mastoid TB (ACMTB) = UTTB Anterior Shoulder Triggerband
- (ASTB)
- Posterior Shoulder Triggerband (PSTB)
- Deltoid Triggerband (DeltTB) Latissimus Dorsi Triggerband (LDTB)
- Pectoralis Triggerband-Major & Minor

Common Shoulder HTP's

- Supraclavicular HTP (SCHTP)-#1 cause of loss of Abduction, Internal Rotation of shoulder, and Cervical Rotation to same side
- Subscapular HTP (SSHTP)-loss of External Rotation Deltoid HTP (DHTP)-loss of
- Abduction
- Levator Scapula HTP (LSHTP) Periscapular HTP (PSHTP)
- Biciptal HTP (BHTP)

Hands On Treatment Shoulder CyD's **Common Shoulder CD's** Anterior Acromio-Clavicular Double Thumb Technique Claw Technique

- Continuum Distortion (AACCD)
- Posterior Acromio-Clavicular Continuum Distortion (PACCD) Deltoid Continuum Distortion
- (DeltCD)
- Coracoid Continuum Distortion (CorCD)
- Squeegee Technique
- Cupping with Movement
- Plunger Clamps
- Needle Mattress

Hands On

- Treatment Shoulder UFD's
 - Traction Thrust-Long arm, Short arm
 - Post Technique
 - Whip Technique
 - Frogleg Technique
 - Hallelujah Lift-Scapulothoracic joints
 - BSTD Technique-AC/SC joints

Treatment Shoulder RFD's

- Refolding Distortions (RFD)
 - Compression Thrust
 - Frogleg Technique
- Brute Force Technique Intermuscular Septal Folding
- Distortions (IMSFD) - Chicken Wing Technique
 - Frogleg Technique Axial Rotation Technique (Anchorage Twist)

Hands On

- Tectonic Fixations (TF) – Slow Tectonic Pump
 - Low Velocity, High Amplitude (LVHA), Spencer Technique, Articulatory Technique
 - Brute Force Technique

Conclusion

- Thank you for your participation
- · Hands-On Session will encourage practice
- Use the knowledge you have gathered
- Enjoy your successes, they are expected
- Be thankful for your failures, they are your best teachers.
- Welcome to the FDM

In Memory of Stephen Typaldos, D.O. Founder March 25, 1957-April 5, 2006

> www.fascialdistortionmodel.com www.afdma.com www.Typaldos.org

Contact Information

Byron Perkins, DO, Medical Director Cornerstone Clinic: Medical & Counseling Center 1825 Academy Drive Anchorage, AK 99507 (907)522-7091, bperkins@christianhealth.org www.cornerstoneclinic.org

