Simple Shoulder Exam and Treatment

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Disclosures

- No financial disclosures
- I do have a website www.drrobrehab.com that has free, non-membership exercise videos

Learning Objectives

- After todays lecture, you will know:
- 1) A simple and quick method for diagnosing shoulder pain
- 2) An OMM sequence for the shoulder pain that can be done in a chair
- 3) A simple shoulder rehabilitation sequence, using a door-frame

Deep Thoughts, by Dr. Still

“An Osteopath reasons from his knowledge of anatomy. He compares the work of the abnormal body with the normal body.”

“To find health should be the objective of the doctor. Anyone can find disease.”

Pain is an obvious item we address
However, OMM can be effective
in the absence of pain

Osteopathic Teaching Model

Objectives for Upper Extremity Lab

- Describe the difference between an Anatomical-Structural issue vs a Functional issue (aka “Orthopedic” and “Osteopathic” exams)
- Perform a Basic Shoulder Exam and understand what information each test tells you
- Perform the Osteopathic Exam and Treatment
- Describe how the Orthopedic exam and the Osteopathic exam merge into one comprehensive exam

- Surgical vs non-Surgical evaluation
- Traumatic-Anatomical vs Functional evaluation

- First and foremost: does this patient have a surgical issue due to an obvious trauma or anatomical problem -→ refer to Ortho
  - HINT: 80% of all shoulder issues are “non-specific” shoulder pain, Subacromial Impingement Syndrome, Rotator Cuff tendonopathy: non-surgical
- Second: use these ***Orthopedic*** tests to determine a more accurate diagnosis, if possible. If clearly not surgical, then its rehabilitation..

- Third: what FUNCTIONAL issues are contributing to the patients problem? ***Osteopathic*** Evaluation

This is an example of the “Anatomical” Shoulder. SC joint, AC joint, Scapulo-thoracic joint, GH joint

Anterior view

Posterior view

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Netters 5th Edition, Plate 411 Thieme 2nd edition, pg. 289

Gleno-humeral and Scapulo-thoracic joints – move together

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Scapulothoracic Rhythm

What is the “Functional” Shoulder Anatomy

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Tendonitis

- Rotator Cuff
- Bicep
- Medial and lateral epicondylitis
- Thumb tendonitis – abductor policis longus

Degenerative Joint Disease

- Acromio-clavicular
- Gleno-humeral

Dislocations

- Acromio-clavicular
- Gleno-humeral

Subacromial Impingement Syndrome

- Bursitis
- Mechanical squeeze of the rotator cuff

Trauma/Tears

- Rotator Cuff
- Biceps
- Medial Ulnar Collateral

Compression neuropathy

- Ulnar Tunnel Syndrome
- Carpal Tunnel Syndrome

Diagnostic Accuracy of Clinical Tests for Subacromial Impingement Syndrome: A Systematic Review and Meta-Analysis

Alqunaee, M. et al Arch Phys Med Rehabil vol 93 Feb 2012: 229-236

Shoulder Impingement Syndrome	Neers, Hawkins, Horizontal adduction test
Supraspinatus tear	Empty can test, full can test, drop arm test, painful arc test, palpation, resisted abduction
Infraspinatus and teres minor tear	Resisted external rotation, external rotation lag sign, Patte's test, Hornblower's sign
Subscapularis tear	Bear-hug test, belly-press test, belly-off test, lift-off test, internal rotation lag sign, internal rotation strength sign

What makes the shoulder so difficult to diagnose?

- It has 5 different “joints,” supported primarily by muscles, that form a *Kinetic Chain* which all move during so called “shoulder motion”
  - One or more “chains” can be a problem, causing 1 or several diagnoses at the same time
  - Therefore, it is infrequent that a single shoulder test will actually give you a THE answer
  - You can have two separate but equal diagnoses of the shoulder
    - i.e it is common for Bicep Tendonitis and Rotator Cuff Tendonitis to be concurrent diagnoses….but the most common reason for these two issues are problems in scapular function

Shoulder Exam Sequence:

- Palpate the Rotator Cuff, Bicep tendon, Scapular muscles
- Shoulder Flexion and Abduction while palpating Scapular movement
- “Painful Arch” test
- “Drop Arm” test
- Full Can Test
- Apprehension test with Relocation:
- Speical Tests: Neers, Hawkins, Speeds

- Shoulder “Core” tests”
  - External Rotation
  - Shoulder Press Test
  - Belly Press Test

Traumatic-Anatomical vs Functional Exam:

- ***Palpation***: *obvious anatomical issues; tenderness*
- ***Shoulder Flexion/Abduction & Scapular movement***: *Range of Motion and dynamic scapular movement*
- "***Painful Arch" test***: Shoulder *Abduction pain between 80-130 degrees*
- ***"Drop Arm" test***: *suddenly dropping arm or having severe pain when returning the shoulder from a fully elevated position*
- ***Apprehension test with Relocation***: *passive anterior glide of the humeral head*
- ***Full Can Test***: *thumbs pointing upwards, 45 degree outward at 90 degrees and physician applies 4-finger pressure downward*
- Speical Tests: Neers, Hawkins, Speeds

Traumatic-Anatomical vs Functional Exam:

- Palpation: *tears and inflammation*
- Shoulder Flexion-Abd/Scapular movement: *rotator cuff health and gleno-humeral/scapula-thoracic rhythm*
- “Painful Arch” test: *rotator cuff injury; subacromial impingement*
- “Drop Arm” test: *rotator cuff injury*
- Full Can Test: *supraspinatus injury*
- Apprehension test with Relocation: *gleno-humeral instability*

Traumatic-Anatomical vs Functional Exam

- Combine history and physical exam and determine if this patient has to bypass rehab and go see Orthopedics
  - Clear recent trauma
  - Instability
  - Most likely then, most of these tests will be abnormal in pain and limited movement

- If they are clearly not surgical, then proceed with Osteopathic exam and treatment at that first visit

- **HINT**: physical therapy treatment for *Rotator Cuff tendonopathy, Subacromial Impingement Syndrome, Bicep Tendonitis, and "non-specific" shoulder pain* have a lot of overlap…

What do I do?

Trauma Pain Exam: lots of effort	• X-ray • Orthopedic consult
Non-trauma Minimal pain Exam: effortless	• Most likely no x-ray • Rehabilitation

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- Special Tests: Neers, Hawkins, Speeds

“Shoulder Core” for scapular dyskinesis

- External Rotation
- Belly Press Test
- Shoulder Press Test

OMM Sequence

- Neck Stretch
- Rotator Cuff Counter-strain
- First Rib treatment
- Clavicular exaggeration
- Scapular Release – DMFR
- Subscapularis deep tissue release
- Gleno-humeral passive movement
- Radial Head - ME
- Distal Interoseous LVLA
-

Rehabilitation

- Door-Frame Full-Body Mobility Sequence

- www.drrobrehab.com

References

- *Diagnostic Accuracy of Clinical Tests for Subacromial Impingement Syndrome: A Systematic Review and Meta-Analysis* Alqunaee, M. et al Arch Phys Med Rehabil vol 93 Feb 2012: 229-236

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