Simplifying Shoulder Rehab: Using the Shoulder Symptom Modification Procedure

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Summary. Shoulder rehab can be complicated and flustrating as there are many variables to consider. A bary dinicitation as the end of the second se



Objectives

- 1. A concise review of normal and abnormal shoulder biomechanics.
- 2. Evidence-based review regarding the dilemma of solely relying on imaging and common special tests to guide treatment.
- 3. Use the SSMP to make a clinical diagnosis based on Patient Response Method.
- Use the SSMP to develop a patient-centered treatment plan to improve shoulder function including taping, manual therapy, and exercise for the thoracic spine, scapulothoracic and glenohumeral joints.
- 5. Efficiently rule out specific shoulder conditions that may not respond to use usual rehab interventions.
- 6. Develop evidence-based progressive shoulder strengthening program.









Shoulder Symptom Modification Procedure (SSMP) - Scapular Position

2a. Scapular position

Elevation
Protraction
Posterior tilt
Internal rotation

Combinations_

Depression
 Retraction
 Anterior tilt
 External rotation

2b. Winging scapula

□ N/A □ Left □ Manual stabilisation □ Other____ Right
 Both
 Taping technique

(change start position-no assistance)^{4,6,7}



performed in the patient's natural positure. Ihen, symptomatic shoulder flexion is repeated after the scapula is passively placed in 1 of 3 movement planes (elevation/depression, protraction/retraction, anterior/opsterior till) or combinations of movement planes. The scapula is allowed to move and return to its "new" starting position. Scapular movement is not facilitated or restricted.



FIGURE 3. With more demanding movements, such as throwing and swimming, assessment of the influence of scapular position on the painful movement is achieved using taping or specially designed neoprene belts. In this instance, throwing is repeated after the scapula is taped into elevation.

Shoulder Symptom Modification Proce	edure
(SSMP) - HH Depression Flexion Sit or	Stand

3. Humeral head procedures

- Humeral head depression [flexion] standing / sitting
 Humeral head depression [abduction] standing / sitting
 Humeral head depression [flexion] supine
 Humeral head depression [abduction] supine
- External rotation test
 Assisted elevation-flexion
- Adduction resistance test (ER) Adduction resistance test (IR)
 AP test AP test (with inclination)_____

\square PA test \square PA test (with inclination)

Other____





Shoulder Symptom Modification Procedure (SSMP) - Neuromodulation
1.Spinal mobilizations
2.Dry needling
3.Soft tissue mobilization
4. Neurodynamic Mobilizations

SSMP-Intervention: Impairment Based Regional Corrective Procedures: Manual Therapy: Taping and Mobility Exercises
1.Scapula
1.Sidelying scapular mobilization ^{8,9}
2.Taping ⁷
3.Resistance ^{20–22}

•

SSMP-Intervention: Impairment Based Regional Corrective Procedures: Manual Therapy: Taping and Mobility Exercises

- 1.Humeral head
 - 1. Joint Mobilization^{23–26}
 - 2.Corrective A/P or P/A with shoulder fixation belt
 - 3.Taping²⁷



Progressive rotator cuff strengthening^{28–35}

Evidence-Based Strength Training for the Upper Quarter

Progressive rotator cuff strengthening^{28–35}

1. Early Phases

- 1. Low Compression Motions: Theraband pull down, Adduction, Rows
 - 1. Low resistance, pain-free ROM
- 2. An isometric contraction in the painful directions
 - 1.15-30 seconds, 80% effort, 3-5 reps, 1-2 x day



Evidence-Based Strength Training for the Upper Quarter

Progressive rotator cuff strengthening^{28–35}

1. Early Phases 2. Torso and upper arm supported isotonics

- 1. Light load, 3-5 sets, 20-30 reps, 5-7 x day, QD
- 2. Seated Supported ER
- 3. Prone ER
- 2. Shoulder ROM
 - 1. Pain-free ROM 10 -20 reps, 2-3 sets
 - 2. Table (0-45 degrees) Hand Slides Flexion, scaption, abduction
 - 3. Shoulder ROM Wall Slides or single flexion or scaption



Evidence-Based Strength Training for the Upper Quarter

Progressive rotator cuff strengthening^{28–35}

1.Intermediate Phases-

- 1. Start increasing load and GHJ compression
- 2. Increase ROM, planes and joints
- 3. Load moderate, 3-5 sets, 8-15 reps to fatigue, 3-5 days, QD

1.Lateral Raise Full Can

- 1.Sidelying Pain-free ROM
- 2.Standing Full Can pain-free ROM
- 3.PNF Pattern



Evidence-Based Strength Training for the Upper Quarter

Progressive rotator cuff strengthening^{28–35}

1.Intermediate Phases-

- b. Standing self-supported 90/90 ABD/ER c. ER 0/90

- c. ER 0/90 d. Shoulder Press i. Supine free weight narrow bench press ii. Supine free weight wide (90 abduction) bench press iii. Pallof Press single or double arm iv. Push Up Progression wall > table > floor



Evidence-Based Strength Training for the Upper Quarter

Progressive rotator cuff strengthening^{28–35}

1.Intermediate Phases-

e. Landmine press with bar or band or med ball g. Arnold press h. Cable row to overhead press



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 - 2. Standing Full Can pain-free
 - ROM 3. PNF Pattern



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Interval Sport Training^{38–40}

- 1.Based on sports demand and task
- 2.Step by step progression based on tolerance

3.Soreness rules









Screening for Specific Conditions

1. Bicipital Tendonitis^{7,41–43}

1. Anteromedial shoulder pain that may refer along the radial nerve distribution

2. LHB tenderness

3. Localized and concordant pain with Speed, Yergason's test (low Sp & SN)

Long Head of the Biceps Tendon Pain: Differential Diagnosis and Treatment

> PTORN & KRUPP, MD¹ + MARK A. KEVERN, PT, DPT, SCS² + MICHAEL D. GAINES, MD¹ STANLEY HOTARA, PA-C² + STEVEN R. SINGLETON, MD, RCS³

Screening for Specific Conditions

1. Adhesive Capsulitis⁴³

1.No gold standard

2.Global loss of shoulder motion active and passive

3.Staging

Stage	Description	Course of Time
Freezing/Inflamed Stage	Gradual onset of diffuse pain, loss of ROM in the shoulder.	6 weeks to 9 months
Frozen/Stiff Stage	Improvement in pain with residual stiffness.	4-9 months or more
Thawing Stage	Gradual return of ROM in the shoulder.	5-26 months
sa=i&source=images&cd=&cad=rja&uact=&&ved=2r	http://www.googlac.com/url? ahUKEwiOn_Wax2PiAhWxneAKIRKaschamOgReBABEEULustri- ahoulder&psig=AO-Wew22WJSQU-q2gkape3GOEE4/Ih&ust=1557	ntps%34%2F%2Fwww.doldmd.com%2Fadheaiwe-capsulitis-frc 966198610861



Screening for Specific Conditions

- 1. Cervical Radiculopathy44-46
 - 1. Test Item cluster by Wainer et al
 - 1. Cervical rotation < 60 degrees to the involved side
 - 2.(+) Spurling Test
 - 3.(+) Cervical Traction test
 - 4.(+) ULTT A Medina Nerve Bias
 - 2. Shoulder Abduction Test^{44,46}

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