



7858 Shrader Rd  
Richmond, Virginia 23294  
Adhesive Capsulitis Rehabilitation Protocol

## Adhesive Capsulitis (Frozen Shoulder) Guidelines

The following adhesive capsulitis guidelines were to assist with clinical decision-making to optimize patient outcomes and facilitate return to prior functional level. These guidelines apply specifically to individuals with primary idiopathic adhesive capsulitis and are categorized into 4 stages.

The stages are a continuum of disease with stages 1 and 2 characterized by pain due to synovitis and stages 3 and 4 characterized by capsular contracture.

- **Stage 1:** Pre-adhesive- high irritability due to synovitis, painful shoulder active/passive range of motion (A/PROM) with empty feel
- **Stage 2:** Freezing- high to moderate irritability due to synovitis, painful and limited shoulder A/PROM
- **Stage 3:** Frozen- moderate to minimal irritability due to capsular contracture, stiff shoulder with pain at end ranges of A/PROM
- **Stage 4:** Thawing- low irritability, improving shoulder A/PROM with minimal pain at end ranges



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## STAGE I: High Irritability/Pre-Adhesive – Phase 1

### PRECAUTIONS

- Avoid pain provoking activities and sudden movements e.g. sleeping on shoulder, reaching overhead or out to the side, carrying heavy bags with involved extremity, weight bearing on involved extremity
- Avoid painful exercises and activities, e.g. reaching behind back, overhead
- Do not immobilize the shoulder and continue to use the arm in pain-free activities
- Closely monitor response to treatment because therapeutic exercise and manual therapy may exacerbate condition; response to treatment may clarify diagnosis
- Following GH corticosteroid injection, hold formal PT for 2 weeks

### TREATMENT RECOMMENDATIONS

- Patient education
  - Nature of the condition and typical progression



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- Activity modification to decrease or avoid pain
  - Postural awareness
  - Early recognition and treatment if occurs in contralateral shoulder
  - Superficial heat or cold modalities for pain management and relaxation
  - Gentle range of motion exercises, e.g. PROM in pain-free ranges, pendulums
  - Postural exercises/re-training
    - Low grade joint mobilization for pain management
    - Pain-free, low intensity PROM / stretching
    - Scapular mobility
    - Gentle soft tissue mobilization as indicated
  - Strengthening/stabilization in pain-free ranges
  - Peri-scapular muscles
  - Home exercise program (HEP)
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#### EMPHASIZE

- Patient understanding of condition
- Symptom management
- Activity modification
- Early recognition and minimization of disease process

#### MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE (of Stage 1)

- Decreased pain and irritability
- Progressing shoulder range of motion
- Goal of stage 1 is early recognition and treatment to resolve the condition and prevent progression through the remaining stages
- If condition is not resolving, reconsider differential diagnosis and move to stage 2 guideline if indicated.



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## STAGE I: High Irritability/Pre-Adhesive – Phase 2

### PRECAUTIONS

- Avoid pain provoking activities and sudden movements while gradually resuming normal use
- Monitor overhead activities and overexertion until symptoms are fully resolved
- Continue to monitor irritability and adjust therapy program as needed
- Following GH corticosteroid injection, hold formal PT for 2 weeks

### TREATMENT RECOMMENDATIONS

- Patient education
  - Activity modification to decrease or avoid pain
  - Postural awareness
  - Early recognition and treatment if occurs in contralateral shoulder
  - Importance of HEP
- Progress range of motion exercises
- Postural exercises/re-training



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	<ul style="list-style-type: none"><li>▪ Manual therapy<ul style="list-style-type: none"><li>○ PROM/ stretching</li><li>○ Scapular mobility</li><li>○ Soft tissue mobilization as indicated</li></ul></li><li>▪ Strengthening/stabilization<ul style="list-style-type: none"><li>○ Peri-scapular muscles</li><li>○ Shoulder musculature</li></ul></li><li>▪ Progress HEP</li></ul>
EMPHASIZE	<ul style="list-style-type: none"><li>▪ Return to normal activities with good mechanics</li><li>▪ Avoidance of secondary pathologies, e.g. impingement</li><li>▪ Safe and appropriate HEP progression</li></ul>
MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE	<ul style="list-style-type: none"><li>▪ Full shoulder PROM and AROM</li><li>▪ Normal scapulohumeral rhythm</li><li>▪ Resolved pain and irritability</li><li>▪ Independent HEP</li><li>▪ If condition worsens or does not resolve, reconsider differential diagnosis and move to stage 2 guideline if indicated.</li></ul>



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## STAGE II: High-Moderate Irritability – Phase 1

### PRECAUTIONS

- Avoid pain provoking activities and sudden movements, e.g. sleeping on shoulder, reaching overhead or out to the side, carrying heavy bags with involved extremity, weight bearing on involved extremity
- Avoid painful exercises and activities, e.g. reaching behind back, overhead
- Do not immobilize the shoulder and continue to use the arm in pain-free activities
- Closely monitor response to treatment because therapeutic exercise and manual therapy may exacerbate condition
- Closely monitor true GH motion because pattern of motion loss will clarify diagnosis
- Following GH corticosteroid injection, hold formal PT for 2 weeks



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## TREATMENT RECOMMENDATIONS

- Patient education
- Superficial heat or cold modalities for pain management and relaxation
- Progress range of motion exercises
- Continue with PROM/stretching for elevation, external rotation (ER), IR
- Active assisted range of motion (AAROM), e.g. ER/IR in modified neutral position
- Manual therapy
- Low grade joint mobilization for pain management and to address capsular restrictions
- PROM into tissue resistance within patient's and shoulder's tolerance
- Gentle soft tissue mobilization as indicated
- Strengthening/stabilization in pain-free ranges
- AROM in scapular plane
- Postural exercises/ re-training
- Consider hydrotherapy
- Progress HEP





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#### EMPHASIZE

- Patient understanding of condition
- Symptom management
- Minimizing loss of GH range of motion
- Activity modification

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#### MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE

- Decreased pain and irritability
- Improving range of motion

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### STAGE II: High-Moderate Irritability – Phase 2

#### PRECAUTIONS

- Avoid pain provoking activities and sudden movements, e.g. sleeping on shoulder, reaching overhead or out to the side, carrying heavy bags with involved extremity, weight bearing on involved extremity
  - Do not immobilize the shoulder and continue to use the arm in pain-free activities
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- Closely monitor response to treatment because therapeutic exercise and manual therapy may exacerbate condition
  - Following ultrasound-guided GH corticosteroid injection, hold formal PT for 2 weeks

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### TREATMENT RECOMMENDATIONS

- Encourage use of UE within pain-free range without compensatory patterns
  - Active warm-up/ conditioning, e.g. UE ergometry
  - Progress range of motion exercises, avoiding compensatory patterns
  - Progress PROM/stretching for elevation, ER, IR
  - Closed chain PROM, e.g. table slides, in door frame
  - Progress A/AAROM, e.g.:
  - AAROM with cane, e.g. ER/IR in progressive ranges of abduction, moving toward 90/90 position
  - Pulleys with good humeral head control
  - Manual therapy
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### Adhesive Capsulitis Rehabilitation Protocol

- Joint mobilization to address evaluation-based restrictions
- Mobilization with movement (MWM)
- Stretching into tissue resistance within patient's and shoulder's tolerance
- Soft tissue mobilization as indicated
- Neuromuscular reeducation
  - Rhythmic stabilization
  - PNF
- Strengthening/ stabilization in pain-free ranges
  - Progressive resistance exercise (PRE) in scapular plane
  - Rotator cuff and peri-scapular muscles
  - Closed chain strengthening
- Active warm-up/Conditioning, e.g. UE ergometry
- Postural exercises/ re-training
- Consider hydrotherapy
- Progressive increase in stretching and strengthening techniques



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	<ul style="list-style-type: none"><li>▪ Progress HEP</li></ul>
EMPHASIZE	<ul style="list-style-type: none"><li>▪ Restoring shoulder ROM with proper mechanics</li><li>▪ Restoring shoulder strength</li><li>▪ Gradual return to previous level of function/activity without compensatory patterns</li></ul>
MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE	<ul style="list-style-type: none"><li>▪ Full shoulder range of motion</li><li>▪ Normal scapulohumeral rhythm</li><li>▪ UE strength equal to uninvolved side</li><li>▪ If pain has improved but other criteria have not been achieved, decrease frequency but avoid premature discharge.</li><li>▪ If condition is worsening (i.e. less pain but increasing stiffness), move to stage 3 guideline.</li></ul>



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## STAGE III: Moderate-Minimal Irritability

### PRECAUTIONS

- Monitor pain provoking activities and movement for increase in irritability extremity
- Avoid painful exercises and activities, e.g. reaching behind back, overhead
- Avoid too much, too soon as increase activities and therapeutic exercise

### TREATMENT RECOMMENDATIONS

- Progress range of motion exercises
  - A/AA/PROM as tolerated
  - Stretching into tissue resistance
  - Low load prolonged positioning
- Manual therapy
  - Joint mobilization
  - Stretching into tissue resistance and for increased duration
  - Soft tissue mobilization
- Progress neuromuscular reeducation and PREs in pain-free range with optimal mechanics



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	<ul style="list-style-type: none"><li>▪ Postural exercises/ re-training</li><li>▪ Progress hydrotherapy program</li><li>▪ Progress HEP with emphasis on stretching and PREs</li></ul>
EMPHASIZE	<ul style="list-style-type: none"><li>▪ Restoration of shoulder ROM with proper mechanics</li><li>▪ Promotion of pain-free ADLs</li><li>▪ Strengthening</li></ul>
MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE	<ul style="list-style-type: none"><li>▪ Minimal pain at end ranges of shoulder A/PROM</li><li>▪ Improving shoulder A/PROM with good mechanics</li></ul>



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## STAGE IV: Low Irritability (Thawing)

### PRECAUTIONS

- Monitor pain provoking activities and movement
- Avoid painful exercises and activities, e.g. reaching behind back, overhead
- Avoid too much, too soon as increase activities and therapeutic exercise
- Monitor for secondary pathology, e.g. caused by faulty mechanics

### TREATMENT RECOMMENDATIONS

- Progress range of motion exercises
  - A/AA/PROM as tolerated
  - Stretching into tissue resistance
  - Low load prolonged positioning
- Manual therapy
  - Joint mobilization
  - Stretching into tissue resistance and for increased duration
  - Soft tissue mobilization



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	<ul style="list-style-type: none"><li>▪ Progress neuromuscular re-education and PREs in pain-free range with optimal mechanics</li><li>▪ Postural exercises/ re-training</li><li>▪ Progress hydrotherapy program</li><li>▪ Progress HEP with emphasis on return previous level of function</li></ul>
EMPHASIZE	<ul style="list-style-type: none"><li>▪ Restoring shoulder ROM with proper mechanics</li><li>▪ Restoring shoulder strength</li><li>▪ Gradual return to previous level of function/activity without compensatory patterns</li></ul>
MINIMUM CRITERIA FOR DISCHARGE	<ul style="list-style-type: none"><li>▪ Full shoulder range of motion with normal scapulohumeral rhythm</li><li>▪ UE strength equal to uninvolved side</li><li>▪ Pain free ADLs</li><li>▪ Independent with HEP and appropriate progression</li><li>▪ If returning to sport, consider collaboration with trainer, coach or performance specialist</li></ul>





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