





Updated: June 2020

# Twincities should erandel bow.com Dr. Chad Myeroff's Rehabilitation Protocol

# Table of Contents

Shoulder General Conditioning	4
Scapular Dyskinesia / Thoracic Outlet / SLAP Tear Non-Operative	5
Adhesive Capsulitis (Frozen Shoulder) Non-operative	
Rotator Cuff Tear Non-Operative	
Accelerated Rotator Cuff Repair	8
Standard Rotator Cuff Repair	9
Protected Rotator Cuff Repair	10
Superior Capsular Reconstruction	11
Acromioclavicular (AC) Joint Separation – Non-Operative	12
Acromioclavicular (AC) Joint Separation – Reconstruction or Repair	13
Sternoclavicular (SC) Joint – Reconstruction or Repair	14
Proximal Biceps Tenodesis (open or arthroscopic)	15
Pectoralis Major Repair	16
Distal Clavicle Excision (open or arthroscopic)	17
Arthroscopic Debridement and/or Subacromial Decompression	18
Arthroscopic Shoulder Capsular Release, Manipulation Under Anesthesia	19
Anterior Shoulder Dislocation (Anterior Bankart) Non-Operative	20
Posterior Shoulder Dislocation (Posterior Bankart) Non-operative	2
Arthroscopic Anterior Bankart Repair (or SLAP)	22
Arthroscopic Posterior Bankart Repair	23
Open Anterior Bankart Repair (subscap protection)	24
Open Posterior Shoulder Fracture-Dislocation Repair (Modified McLaughlin)	2

Dr. Chad Myeroff, Shoulder and Elbow Specialist

twincities should erandel bow.com/patiented ucation documents/twincities should erandel bow.com/patiented ucation videos/







Latarjet Procedure (Coracoid Transfer)	26
Anatomic Total Shoulder Arthroplasty / Hemiarthroplasty	27
Reverse Total Shoulder Arthroplasty	28
Proximal Humerus Fracture – Non-operative	29
Proximal Humerus Fracture – Operative Fixation	30
Proximal Humerus Fracture – Reverse Shoulder Arthroplasty	31
Clavicle Fracture – Non-Operative	32
Clavicle Fracture – ORIF	33
Distal Clavicle Fracture – ORIF	34
Rib Fracture / Chest Wall – ORIF	35
Scapula Body Fracture – Non-operative	36
Scapula Body Fracture – ORIF	37
Humeral Shaft Fracture – Non-Operative	38
Humeral Shaft Fracture – ORIF	39
Distal Humerus Fracture – ORIF	40
Medial Epicondyle Fracture – ORIF	41
Olecranon Fracture – Non-Operative	42
Olecranon Fracture – ORIF	43
Radial Head Fracture – Non-operative	44
Radial Head Fracture – Operative (ORIF / Arthroplasty)	45
Terrible Triad Fracture Dislocation – ORIF	46
Elbow Dislocation – Operative and Non-operative	47
Lateral Ulnar Collateral Ligament (LUCL) - Reconstruction or Repair	48
Ulnar Collateral Ligament (UCL) - Non-Operative	49









Ulnar Collateral Ligament (UCL) - Tommy John Reconstruction	50
Monteggia Fracture Dislocation – ORIF	51
Elbow Release (Arthroscopic or Open)	52
Total Elbow Arthroplasty	53
Lateral Epicondylitis (Tennis Elbow) – Non-Operative	54
Lateral Epicondylitis (Tennis Elbow) – Operative	55
Medial Epicondylitis (Golfer's Elbow) – Non-Operative	56
Medial Epicondylitis (Golfer's Elbow) – Operative	57
Distal Biceps Repair	58
Cubital Tunnel Release	59
Forearm Fracture – ORIF	60
Distal Radius Fracture – Non-op	61
Distal Radius Fracture – ORIF	62
Finger Range of Motion Diagram	63
Elbow Elevation Technique Diagram	64
Standard Elbow Range of Motion Diagram	65
LUCL Protection Elbow Range of Motion Diagram	66
Shoulder Range of Motion Diagram	67









# Shoulder General Conditioning

### Three times per day home exercise program including:

- Phase I
  - 4 quadrant stretches using A/AA/PROM
    - Wall climbs, table slides, sleeper stretches
    - Wand exercises: Supine gravity eliminated FF and external rotation. IR behind the back
  - Posture exercises
  - Periscapular isometrics
    - Rhomboid, Latissimus, Deltoid
- Phase II (when full ROM achieved)
  - Progress to rotator cuff and periscapular strengthening
    - Including isometrics and therabands
- Phase III (at therapist's discretion)
  - o Progress towards generalized strengthening and core conditioning
  - o Return to high level functional ADLs and simulation of work environment

\*OK for modalities as indicated including pool therapy, dry needling, acupuncture as long as it does not detract from regaining motion, posture and strength









# Scapular Dyskinesia / Thoracic Outlet / SLAP Tear Non-Operative

### Three times per day home exercise program including:

- Phase I
  - 4 quadrant stretches using A/AA/PROM
    - Wall climbs, table slides
    - Wand exercises: Supine gravity eliminated FF and external rotation. IR behind the back, sleeper stretches
    - Pec minor stretches (in doorway)
  - Posture exercises
  - Periscapular isometrics
    - Rhomboid, Latissimus, Deltoid
  - o Periscapular proprioception and stabilization
- Phase II (when full ROM achieved)
  - Progress to rotator cuff and periscapular strengthening
    - Including isometrics and therabands
  - Continue to focus on periscapular proprioception and stabilization
- Phase III
  - Progress towards generalized strengthening and core conditioning
  - o Return to high level functional ADLs and simulation of work environment

\*OK for modalities as indicated including pool therapy, dry needling, acupuncture as long as it does not detract from regaining motion, posture and strength



More info: twincities should erandel bow.com/slap/









# Adhesive Capsulitis (Frozen Shoulder) Non-operative

### Three times per day gentle self-guided home stretching program including:

- A/AA/PROM TID 4-quadrant gentle static progressive stretches
  - o Pulleys, table slides, wall climbs, sleeper stretches, supine wand exercises in all planes
- Posture and rhomboid isometrics
- \*OK for modalities as indicated including pool therapy, dry needling, massage, acupuncture.
- \*Patient with true adhesive capsulitis may benefit from intra-articular glenohumeral steroid injections up to 4 times per year if needed. Please contact my office and we will facilitate if indicated.



More info: twincities should erandel bow.com/frozen shoulder/









# Rotator Cuff Tear Non-Operative

### Three times per day home exercise program including:

- Phase I
  - 4 quadrant stretches using A/AA/PROM
    - Wall climbs, table slides, sleeper stretches
    - Wand exercises: Supine gravity eliminated FF and external rotation. IR behind the back
  - Posture exercises
  - Periscapular isometrics
    - Rhomboid, Latissimus, Deltoid
- Phase II (when full ROM achieved)
  - Progressive rotator cuff and periscapular strengthening
    - Including isometrics and therabands
- Phase III (at therapist's discretion)
  - Independent home exercise program (lifelong)
  - Progress towards generalized strengthening and core conditioning
  - Return to high level functional ADLs and simulation of work environment

\*OK for modalities as indicated including pool therapy, dry needling, acupuncture as long as it does not detract from regaining motion, posture and strength

\*Patients limited from participation by overhead pain may occasionally benefit from a steroid injection. Please contact my office and we will facilitate if indicated.



More info: twincities should erandel bow.com/rotatorcuff/









# Accelerated Rotator Cuff Repair

### Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-5 (1st post-operative PT visit scheduled at 1-2 weeks post-operatively)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND TID home exercise program (HEP)
  - Shoulder PROM as tolerated, rhomboid isometrics
  - Pulleys, table slides, supine wand exercises in all planes

#### Phase 2: Week 5-10

- PROM progressing towards AAROM
- Wean out of sling at 6 weeks (maintain sling use for one more week in public)
  - May begin to use arm for ADLs
- Phase I & II stretches
- No lifting > weight of a coffee cup

#### Phase 3: Week 10-14

- Add Phase I cuff strengthening, scapular strengthening
- Add biceps and triceps strengthening
- May use arm for ADLs
- No lifting > 5lbs

#### Phase 4: Week 15-24

- Progressive stretching and strengthening
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No lifting >10 lbs until 18 weeks



More info: twincities should erandel bow.com/rotatorcuff/









# Standard Rotator Cuff Repair

### Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND TID home exercise program (HEP)
  - Shoulder PROM, rhomboid isometrics
  - o FF 0-130°, ER 0-30°, Abduction 0-60°
    - Pulleys, table slides, supine wand exercises
- No lifting > weight of coffee cup, no shoulder AROM

Phase 2: Week 6-12

- Wean out of sling (maintain sling use for one more week in public)
- Full unrestricted PROM progressing towards AAROM
  - Add wand internal rotation up the back
- May begin to use arm for ADLs avoiding any shoulder AROM
- No lifting > weight of coffee cup

Phase 3: Week 12-18

- Add Phase II stretching
- Initiate AROM
  - o At 16 weeks if ROM is full, begin phase I cuff and scapular strengthening
- Light biceps and triceps strengthening
- No lifting > 5lbs, no shoulder AROM.

Phase 4: Week 19-24

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No lifting > 10 lbs
  - o At 24 weeks unrestricted upper extremity strengthening, WBAT

More info: twincities should erandel bow.com/rotator cuff/











## Protected Rotator Cuff Repair

### Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Scapular retractions (rhomboid isometrics), sling donning and doffing
- No lifting, no shoulder AROM.

#### Phase 2: Week 6-12

- Wean out of sling (maintain sling use for one more week in public).
- Formal PT AND TID home exercise program (HEP)
- Progressive unrestricted PROM
  - o Pulleys, table slides, supine wand exercises in all planes
- At 8 weeks
  - May begin to use arm for ADLs avoiding any shoulder AROM
  - o Begin AAROM
- No lifting > weight of coffee cup, no shoulder AROM.

### Phase 3: Week 12-18

- Add phase II stretching
- Initiate AROM
  - o At 16 weeks, if ROM is full, begin phase I cuff and scapular strengthening
- Light biceps and triceps strengthening
- No lifting > 5 lbs

#### Phase 4: Week 19-24

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No lifting > 10 lbs
- At 24 weeks unrestricted upper extremity strengthening, WBAT



More info: twincities should erandel bow.com/rotatorcuff/









## Superior Capsular Reconstruction

## Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- Week 2: Scapular retractions (rhomboid isometrics), sling donning and doffing
- No lifting, no shoulder AROM.

#### Phase 2: Week 6-12

- Wean out of sling (maintain sling use for one more week in public).
- Formal PT AND TID home exercise program (HEP)
- Progressive unrestricted PROM
  - o Pulleys, table slides, supine wand exercises in all planes
- At 8 weeks
  - May begin to use arm for ADLs avoiding any shoulder AROM
  - o Begin AAROM
- No lifting > weight of coffee cup, no shoulder AROM.

#### Phase 3: Week 12-18

- Add phase II stretching
- Initiate AROM
  - o At 16 weeks, if ROM is full, begin phase I cuff and scapular strengthening
- Light biceps and triceps strengthening
- No lifting > 5 lbs

#### Phase 4: Week 19-24

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No lifting > 10 lbs
  - At 24 weeks unrestricted upper extremity strengthening, WBAT



More info: twincities should erandel bow.com/rotatorcuff/









# Acromioclavicular (AC) Joint Separation - Non-Operative

### Three times per day home exercise program including:

#### Phase 1: Week 0-2

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - Elbow should be supported
- Rhomboid and periscapular isometrics, posture exercises
- No lifting > weight of coffee cup
  - o No active shoulder ROM
- · No pushing or weight-bearing through arm

#### Phase 2: Week 2-6

- Wean out of sling for therapy and in the house
  - Continue sling in public and at work
- Continue elbow, wrist and finger motion, periscapular isometrics
- Begin Formal PT AND three times daily (TID) home exercise program (HEP)
  - Shoulder 4 quadrant AA/PROM progressing towards AROM
    - Pulleys, table slides, supine wand exercises in all planes
- No lifting > 5lbs

### Phase 3: Week 6-12 (as pain resolves)

- Discontinue sling altogether
- Advance to gentle strengthening
  - Phase I and II rotator cuff strengthening
- Periscapular and complete extremity strengthening
- No Lifting > 10lbs

#### Phase 4: Week 12-16

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No Restrictions

More info: twincities should erandel bow.com/acseparation/











# Acromioclavicular (AC) Joint Separation - Reconstruction or Repair

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for TID finger, wrist, elbow AROM, hygiene and therapy)
- Add supine passive ER 0-30° with wand at 2 weeks post op
  - \*Focus on static progressive stretching
- Periscapular isometrics in neutral
- No lifting > weight of coffee cup
- No pushing or weight-bearing through arm

#### Phase 2: Week 6-12

- Wean out of sling for therapy and in the house
  - Continue sling in public for 12 weeks
- Light and pain free biceps/triceps strengthening
- Begin PT
  - Unrestricted shoulder PROM
    - Pulleys, table slides, supine wand exercises in all planes
- Shoulder AAROM at 8 weeks
- No pushing or weight-bearing through arm

#### Phase 3: Week 12-18 weeks

- Discontinue sling altogether
- Advance to AROM
  - Continue 4 quadrant stretches
- Phase I and II rotator cuff strengthening
- Periscapular strengthening
- No Lifting > 10lbs
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/acseparation/











# Sternoclavicular (SC) Joint - Reconstruction or Repair

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- Add supine passive ER 0-30° with wand at 2 weeks post op
  - \*Focus on static progressive stretching
- No overhead lifting
- No lifting > weight of coffee cup
- No pushing or weight-bearing through arm

### Phase 2: Week 6-12

- Wean out of sling for therapy and in the house
  - o Continue sling in public until 12 weeks post-operative
- Add periscapular isometrics
- Advance to shoulder PROM / AAROM as tolerated in all planes
  - o Pulleys, table slides, supine wand exercises in all planes
- no more than a coffee cup overhead, avoid pushing and pulling

#### Phase 3: Week 12-18 weeks

- Discontinue sling altogether
- Advance to shoulder strengthening
  - Phase I and II rotator cuff strengthening
  - Periscapular strengthening
- No Lifting > 5 lbs
- Independent home exercise program

#### Phase 4: 18+ weeks

- Return to high level functional ADLs and simulation of work environment
- No return to contact sports prior to 6 months for posterior SC dislocations









## Proximal Biceps Tenodesis (open or arthroscopic)

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - Wean from sling at 2 weeks
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - o Unrestricted shoulder AA/PROM, rhomboid isometrics
- No lifting > weight of coffee cup
- Core strengthening for athletes

#### Phase 2: Week 6-12

- Begin AROM
- Phase 1 cuff, biceps and triceps strengthening once ROM full.
- No lifting > 5 lbs

### Phase 3: Week 12-16

- Continue stretching and strengthening as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/proximal biceps/









## Pectoralis Major Repair

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Begin formal PT AND three times daily (TID) home exercise program (HEP)
  - o Posture, rhomboid isometrics
  - Supine gravity eliminated PROM FF 0-90°, ER to neutral°, Abduction 0-60°
- No lifting > weight of coffee cup

### Phase 2: Week 6-12

- Wean out of sling (maintain sling use for one more week in public)
- Full unrestricted PROM progressing towards AAROM
  - o Pulleys, table slides, supine wand exercises in all planes
- Periscapular isometrics
- May begin to use arm for ADLs avoiding any shoulder AROM
- No lifting > weight of coffee cup

### Phase 3: Week 12-16

- Advance to AROM
- Add Phase II stretching and phase I cuff strengthening, periscapular strengthening
- Add light biceps and triceps strengthening
- No lifting > 5lbs

#### Phase 4: Week 16+

- Progressive unrestricted general shoulder strengthening and conditioning
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/pectear/









## Distal Clavicle Excision (open or arthroscopic)

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - Wean from sling at 2 weeks
- POD 1: hygiene, finger, wrist, elbow AROM
- POD 7-10 (at 1<sup>st</sup> therapy visit): Formal PT AND Three time daily (TID) home exercise program (HEP)
  - Add unrestricted shoulder PROM, rhomboid isometrics
  - Progress AAROM → AROM → Phase I and II cuff and periscapular strengthening as able
- OK to use arm for ADLs
- No lifting > weight of coffee cup

### Phase 2: Week 6-12

- Progressive generalized upper extremity strengthening, no restrictions
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/acarthritis/









## Arthroscopic Debridement and/or Subacromial Decompression

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - Wean from sling at 2 weeks
- POD 1: hygiene, finger, wrist, elbow AROM
- POD 7-10 (at 1<sup>st</sup> therapy visit): Formal PT AND Three time daily (TID) home exercise program (HEP)
  - Add unrestricted shoulder PROM, rhomboid isometrics
  - Progress AAROM → AROM
- OK to use arm for ADLs
- No lifting > 5#

#### Phase 2: Week 6-12

- Phase I and II cuff and periscapular strengthening as able
- Generalized upper extremity strengthening, progress to activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/impingement/









# Arthroscopic Shoulder Capsular Release, Manipulation Under Anesthesia

## Three times per day home exercise program including:

Phase 0: Day of Surgery – Post-op day 2

- Patient will have long acting shoulder block
  - o Should have formal therapy visit pre-arranged day of and day after surgery:
    - Immediately following surgery PACU recovery (POD#0)
    - 1<sup>st</sup> appointment the following morning (POD#1)
- PROM with therapist assist as long as block is functional
- Maintain sling use outside of therapy

### Phase 1: Day 2 – week 6

- Wean out of sling after block wears off
- Formal PT AND Three time daily (TID) home exercise program (HEP)
- Unrestricted PROM and AROM via TID formal PT AND home exercise program
  - o Pulleys, table slides, wall climbs, sleeper stretches, supine wand exercises in all planes
- Scapular stabilization, rhomboid and lower trapezius strengthening
- Use arm for ADLs

## Phase 2: Week 6-12

- Add rotator cuff, and periscapular strengthening once ROM is full
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



#### More info:

twincitiesshoulderandelbow.com/frozenshoulder/



twincitiesshoulderandelbow.com/shoulderstiffness/









# Anterior Shoulder Dislocation (Anterior Bankart) Non-Operative

## Three times per day home exercise program including:

Phase 1: Week 0-2

- Sling as needed (except for hygiene, TID finger, wrist, elbow AROM and therapy)
- Deltoid and periscapular isometrics, posture control

Phase 2: Week 2-6

- Wean from sling (for comfort only)
- A/AAROM and gentle PROM 4-quadrant stretches
  - Pulleys, table slides, supine wand exercises in all planes
  - o Avoid the position of apprehension (90-90) position
- Periscapular isometrics and strengthening, scapular stabilization and proprioception
- Phase I and II rotator cuff strengthening
- Biceps and triceps, total arm strengthening
- Core conditioning

Phase 2: Week 6-12

- Advance to unrestricted A/AA/PROM
- Unrestricted UE and total body strengthening and conditioning
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











# Posterior Shoulder Dislocation (Posterior Bankart) Non-operative

## Three times per day home exercise program including:

#### Phase 1: Week 0-2

- Gunslinger (external rotation) sling full time
- TID finger ROM
- Infraspinatus, Deltoid, periscapular isometrics, posture

### Phase 2: Week 2-6

- Gunslinger (external rotation) sling full time
  - OK to remove for hygiene and TID elbow wrist finger AROM

#### Phase 3: Week 6-12

- Gunslinger (external rotation) sling full time except for hygiene and TID therapy
- A/AAROM and gentle PROM
  - o Upright pulleys, table slides, supine wand exercises in all planes
  - Avoid internal rotation past neutral
- Periscapular isometrics and strengthening, scapular stabilization and proprioception
- Phase I cuff strengthening
- Biceps and triceps, total arm strengthening
- Core conditioning

#### Phase 3: Week 12-16

- Advance to unrestricted A/AA/PROM
- Phase II cuff strengthening
- Unrestricted UE and total body strengthening and conditioning
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











## Arthroscopic Anterior Bankart Repair (or SLAP)

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three time daily (TID) home exercise program (HEP)
  - o Passive ER 0-30 supine wand with elbow at the side
  - Passive FF 0-140 (OK to table slides, pulleys, supine wand exercises)
    - Avoid 90-90 position of apprehension
  - Periscapular isometrics
- Core strengthening
- No lifting greater than a coffee cup

#### Phase 2: Week 6-12

- Wean out of sling (maintain for one more week in public)
- PROM 4-quadrant stretches
  - o No restrictions other than avoiding the 90-90 position of apprehension
  - o Phase I and II stretches
  - Pulleys, table slides, supine wand exercises in all planes
- Periscapular strengthening, isometrics, stabilization and proprioception
- Phase I cuff strengthening
- Light biceps and triceps strengthening
- No lifting > 5 lbs

### Phase 3: Week 12-16

Once ROM is full, begin phase II Cuff and total arm strengthening

#### Phase 4: Week 16-18

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment









## Arthroscopic Posterior Bankart Repair

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - o Passive ER 0-30 supine wand with elbow at the side
  - o Passive FF 0-140 (OK to table slides, pulleys, upright wand exercises)
  - o Periscapular and infraspinatus isometrics
- Core strengthening
- No lifting greater than a coffee cup

#### Phase 2: Week 6-12

- Wean out of sling (maintain for one more week in public)
- PROM 4-quadrant stretches, unrestricted
  - Phase I and II stretches
  - Pulleys, table slides, upright wand exercises in all planes
- Periscapular strengthening, isometrics, stabilization and proprioception
- Phase I cuff strengthening
- Light biceps and triceps strengthening
- No lifting > 5 lbs
  - No pushing or bike riding until 12 weeks post op

#### Phase 3: Week 12-16

- Once ROM is full, begin phase II Cuff and total arm strengthening
- No pushups until 3-4 month's post op

#### Phase 4: Week 16-18

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











## Open Anterior Bankart Repair (subscap protection)

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - AAROM ER to neutral (within confines of pain)
  - Passive FF 0-140 (OK to table slides, pulleys, supine wand exercises)
    - Avoid 90-90 position of apprehension
  - Periscapular isometrics
- Core strengthening
- No lifting greater than a coffee cup

#### Phase 2: Week 6-12

- Wean out of sling (maintain for one more week in public)
- PROM 4-quadrant stretches
  - o ER 0-30 (within confines of pain)
  - Avoid the 90-90 position of apprehension
  - o Phase I and II stretches
  - Pulleys, table slides, supine wand exercises in all planes
- Periscapular strengthening, isometrics, stabilization and proprioception
- Light biceps and triceps strengthening
- No lifting > weight of a coffee cup

#### Phase 3: Week 12-16

- Advance to unrestricted A/AA/PROM
- Once ROM is full, begin phase I and II Cuff and total arm strengthening
- No lifting >5 lbs

#### Phase 4: Week 16-18

- Total arm strengthening, no restrictions
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











# Open Posterior Shoulder Fracture-Dislocation Repair (Modified McLaughlin)

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Gunslinger (ER) sling (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - Active assist ER 0-20 (within confines of discomfort)
  - Passive FF 0-140 (OK to table slides, pulleys, upright wand exercises)
  - No IR past neutral
  - o Periscapular and infraspinatus isometrics
- Core strengthening
- No lifting greater than a coffee cup

#### Phase 2: Week 6-12

- Continue gunslinger sling in 0-20 or external rotation
- AA/PROM 4-quadrant stretches
  - o ER 0-30 (within confines of pain)
  - o Phase I and II stretches
  - Pulleys, table slides, supine wand exercises
  - Avoid IR past neutral
- No lifting > weight of a coffee cup
  - No pushing or bike riding until 12 weeks post op

#### Phase 3: Week 12-16

- Wean from sling
- Advance to unrestricted A/AA/PROM
- Once ROM is full, begin phase I and II Cuff and total arm strengthening
- Periscapular strengthening, isometrics, stabilization and proprioception
- No lifting >5 lbs
  - No bench press of pushups until 4 months

#### Phase 4: Week 16-18

- Total arm strengthening, no restrictions
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment









## Latarjet Procedure (Coracoid Transfer)

## Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - o PROM ER 0-30° with elbow at the side, FF 0-130°
    - Table slides, pulleys, supine wand exercises
  - Periscapular isometrics
- Core strengthening
- No lifting greater than a coffee cup

#### Phase 2: Week 6-12

- Wean out of sling (maintain for one more week in public)
- A/AA/PROM 4-quadrant stretches avoiding the position of apprehension
  - Unrestricted phase I and II stretches
  - o Pulleys, table slides, supine wand exercises in all planes
- Periscapular isometrics, stabilization and proprioception
- Begin phase I cuff strengthening once ROM is full
- Biceps, triceps, deltoid strengthening
- No lifting > 5 lbs

#### Phase 3: Week 12-16

Add total arm strengthening

#### Phase 4: Week 16-18

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











# Anatomic Total Shoulder Arthroplasty / Hemiarthroplasty

### Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - o PROM: ER 0-30° (subscap protection) with elbow at the side, FF 0-140°
    - Overhead pulleys, table slides, supine wand exercises
  - Periscapular isometrics
- No lifting > weight of coffee cup

Phase 2: Week 6-12

- Wean from sling except when in public
- Advance to unrestricted PROM → AAROM
  - Overhead pulleys, table slides, wall climbs, supine wand exercises
- ER (infraspinatus), rhomboid, deltoid, lat isometrics
- Begin to use arm for ADLs avoiding shoulder AROM
- No lifting > 5 lbs
- No active IR

Phase 3: Week 12-18

- Unrestricted AROM
- Phase I cuff strengthening → total arm strengthening once ROM is full
- Periscapular strengthening
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- Activities as tolerated
  - Avoid repetitive heavy lifting, bench press, military press, pushups

0

More info: www.twincitiesshoulderandelbow.com/shoulderarthritis/











# Reverse Total Shoulder Arthroplasty

### Three times per day home exercise program including:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Sling for comfort only (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - Unrestricted AA/PROM
    - Overhead pulleys, table slides, supine wand exercises
  - Deltoid, rhomboid, lat, external rotation isometrics
- No lifting > weight of a coffee cup

Phase 2: Week 6-12

- Wean from sling
- Advance to AAROM → AROM as pain allows
- Overhead pulleys, table slides, wall climbs, supine wand exercises
- Continue isometrics
- Begin to use arm for ADLs
- Activities as tolerated

Phase 3: Week 12-18

- Cuff and periscapular strengthening → total arm strengthening once ROM is full
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- Activities as tolerated
  - Avoid repetitive heavy lifting, bench press, military press, pushups
    - Avoid pushing out of a chair



More info: twincities should erandel bow.com/rotator cuffte ararthropathy/









# <u>Proximal Humerus Fracture</u> – Non-operative

## Three times per day home exercise program including:

Phase 1: Week 0-4 (starting immediately)

- Maintain sling use, keep elbow supported, no shoulder ROM, avoid firing shoulder muscles
- OK to come out of sling for:
  - o hygiene (ok for axillary hangs, no pendulum swings or Codman's
  - o TID finger, wrist, elbow AROM
- No lifting > weight of a coffee cup

## Phase 2: Appx Week 4-8

### \*Initiation will be based in initial signs of fracture callous healing

- Continue sling except for TID therapy
- Formal PT AND three times daily (TID) home exercise program (HEP)
  - PROM 4 quadrant stretches as pain allows
    - Overhead pulleys, table slides, supine wand exercises
  - Posture and rhomboid isometrics
- No lifting > weight of a coffee cup

#### Phase 3: Appx Week 8-12

- \*Initiation based on complete fracture healing
- Wean from sling except in public
- Advance to AAROM then AROM as pain allows
- No lifting > 5#

#### Phase 4: Week 12-16

- Continue aggressive TID HEP shoulder A/AA/PROM
- ullet Cuff and periscapular strengthening ullet total arm strengthening, core strengthening
  - o Initiate once ROM has plateaued
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/proximal humerus/









# Proximal Humerus Fracture – Operative Fixation

### Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled within 7-10 days of surgery)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - PROM 4 quadrant stretches as pain allows
    - Overhead pulleys, table slides, supine wand exercises
  - Posture and rhomboid isometrics
- No lifting > weight of a coffee cup
- No AROM

#### Phase 2: Week 6-12

- Wean from sling except in public
- Continue progressive unrestricted PROM 4 quadrant stretches
  - Posture and rhomboid isometrics
- Advance to AAROM → AROM as pain allows
- Deltoid, rhomboid, lat, ER isometrics
- No lifting > 2#

### Phase 3: Week 12-16

- Cuff and periscapular strengthening → total arm strengthening, core strengthening
  - o Once ROM maximized
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- No restrictions

 $More\ info:\ twincities should er and elbow.com/proximal humerus/$ 











# Proximal Humerus Fracture – Reverse Shoulder Arthroplasty

## Three times per day home exercise program including:

Phase 1: Week 0-6 (1st post-op PT visit should immediately follow 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- POD 7-14: Formal PT AND three times daily (TID) home exercise program (HEP)
  - PROM: ER with elbow at the side, FF 0-140°
    - Overhead pulleys, table slides, supine wand exercises
  - o Periscapular isometrics

#### Phase 2: Week 6-12

- Wean from sling except when in public
- Advance to AAROM as pain allows
- Overhead pulleys, table slides, wall climbs, supine wand exercises
- Deltoid, rhomboid, lat, ER isometrics
- Begin to use arm for ADLs

#### Phase 3: Week 12-18

- Advance to AROM
- Cuff and periscapular strengthening → total arm strengthening
  - Once ROM maximized
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- Activities as tolerated
  - Avoid repetitive heavy lifting
    - No bench press, military press, pushups
    - Avoid pushing out of a chair

More info: twincities should erandel bow.com/proximal humerus/











# Clavicle Fracture – Non-Operative

## Three times per day home exercise program including:

Phase 1: Week 0-4 (early fracture healing)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - o Elbow should be supported
- Rhomboid and periscapular isometrics, posture exercises
- No lifting > weight of coffee cup
  - No active shoulder ROM
- No pushing or weight-bearing through arm

#### Phase 2: Week 4-8

- Wean out of sling for therapy and in the house
  - o Continue sling in public for 12 weeks
- Continue elbow, wrist and finger motion, periscapular isometrics
- Begin Formal PT AND three times daily (TID) home exercise program (HEP)
  - Shoulder 4 quadrant PROM progressing towards AAROM
    - Pulleys, table slides, supine wand exercises in all planes
- No lifting > weight of coffee cup

### Phase 3: Week 8-12 (following clinical fracture healing)

- Discontinue sling altogether
- Advance to AROM
  - o Continue 4 quadrant stretches, periscapular isometrics, posture
- Phase I and II rotator cuff strengthening
- Periscapular and complete extremity strengthening
- No Lifting > 10lbs

#### Phase 4: Week 12-16

- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/clavicle/









## Clavicle Fracture - ORIF

## Three times per day home exercise program including:

Phase 1: Week 0-2 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
- Rhomboid and periscapular isometrics, posture exercises
- No lifting > weight of coffee cup
  - No active shoulder ROM
- No pushing or weight-bearing through arm

#### Phase 2: Week 2-6

- Use sling only as needed
- Continue elbow, wrist and finger motion, periscapular isometrics
- Begin Formal PT AND three times daily (TID) home exercise program (HEP)
  - o Shoulder 4 quadrant PROM, AAROM, AROM
    - Pulleys, table slides, supine wand exercises in all planes
- No lifting > weight of coffee cup

Phase 3: Week 6-12 weeks (following clinical fracture healing)

- Discontinue sling altogether
- Phase I and II rotator cuff strengthening
- Periscapular, complete extremity, core strengthening
- Activities as tolerated (if there are signs of bony healing)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/clavicle/









## Distal Clavicle Fracture - ORIF

## Three times per day home exercise program including:

Phase 1: Week 0-6 (1st PT visit scheduled to follow on day of 2-week post-op surgical visit)

- Maintain sling use (except for TID finger, wrist, elbow AA/AROM, hygiene and therapy)
- Add supine passive ER 0-30°, FF 0-140°, gentle IR up the back with wand at 2 weeks post op
  - \*Focus on static progressive stretching
- Periscapular isometrics in neutral
- No lifting > weight of coffee cup
- No pushing or weight-bearing through arm

### Phase 2: Week 6-12

- Wean out of sling for therapy and in the house
  - Continue sling in public / work for 12 weeks
- Light and pain free biceps/triceps strengthening
- Unrestricted shoulder AA/PROM
  - o Pulleys, table slides, supine wand exercises in all planes
- No lifting 5# at side of 1# overhead

#### Phase 3: Week 12-18 weeks

- Discontinue sling altogether
- Advance to AROM
  - Continue 4 quadrant stretches
- Phase I and II rotator cuff strengthening once ROM full
- Periscapular strengthening
- No Lifting restrictions once fracture is healed
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/clavicle/











# Rib Fracture / Chest Wall – ORIF

### Three times per day home exercise program including:

#### Phase 1: Week 0-6

- Posture and periscapular isometrics
- Incentive spirometry every hour
- Preference for upright or seated posture as able
- Should ambulate at least TID
- Weight bearing as tolerated for transfers and mobilization
  - No lifting > weight of coffee cup overhead
  - Avoid excessive bending and twisting

#### Phase 2: Week 6-12 weeks

- Add upper extremity and core conditioning
- Lift no more than 5# overhead

#### Phase 3: 12-18 weeks

- Activities as tolerated without restrictions
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/ribfractures/









## Scapula Body Fracture – Non-operative

## Three times per day home exercise program including:

#### Phase 1: Week 0-2

- Maintain sling use (except for hygiene, TID finger, wrist, elbow AROM and therapy)
  - OK for axillary cares (hangs) but no pendulum swings / Codman's.
  - Elbow should be supported
- No lifting > weight of coffee cup
  - No active shoulder ROM
- Begin TID HEP for elbow wrist finger ROM

#### Phase 2: Week 2-6

- Use sling except with hygiene and TID therapy
- Continue elbow, wrist and finger motion
- Begin Formal PT AND three times daily (TID) home exercise program (HEP)
  - Shoulder 4 quadrant PROM, AAROM
    - Pulleys, table slides, supine wand exercises in all planes
- No lifting > weight of coffee cup

#### Phase 3: Week 6-12 weeks (following clinical fracture healing)

- Wean from sling
- Add shoulder AROM, continue PROM, AAROM
- Rhomboid and periscapular isometrics, posture exercises
- Phase I and II rotator cuff strengthening when ROM is full and painless and fracture is healed
- Periscapular, complete extremity, core strengthening
- Activities as tolerated (if there are signs of bony healing)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/scapula/









### Scapula Body Fracture - ORIF

#### Three times per day home exercise program including:

#### Phase 1: Week 0-6

- Sling as needed for comfort
- No lifting > weight of coffee cup
- Begin formal PT and TID HEP
  - Elbow wrist finger ROM
  - Shoulder 4 quadrant PROM, AAROM
    - Pulleys, table slides, supine wand exercises in all planes
- Rhomboid and periscapular isometrics, posture exercises

#### Phase 2: Week 6-12 weeks

- Wean from sling
- Add shoulder AROM, continue PROM, AAROM
- Phase I cuff strengthening when ROM is full and painless and fracture is healed
- Periscapular, complete extremity, core strengthening
- Lift no more than 5# overhead

#### Phase 3: 12-18 weeks

- Phase 2 cuff strengthening once ROM is full
- Activities as tolerated without restrictions
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/scapula/









### Humeral Shaft Fracture – Non-Operative

#### Three times per day home exercise program including:

Phase 1: Week 0-2 (to start immediately after initiation of Sarmiento bracing)

- No lifting > weight of coffee cup
- Upright posture at all times, maintain sling use or collar and cuff as needed
  - Elbow should be unsupported as much as possible
- Swelling control (with stocking)
- TID HEP: elbow, wrist, finger A/AAROM. No shoulder ROM
  - Biceps and triceps isometrics

#### Phase 2: Week 2-6

- No lifting > weight of coffee cup
- Wean from sling to allow gravity to align the arm (OK for collar and cuff), continue upright posture
- BID tightening of fracture brace
- daily hygiene and skin checks in pendulum position
- Continue TID HEP: A/AAROM elbow, wrist and finger motion, biceps and triceps isometrics
- Start shoulder periscapular isometrics / shoulder posture
  - No shoulder ROM other than pendulums for hygiene

Phase 3: Week 6-12 weeks (following clinical fracture healing)

- No lifting > 5# at the side, or coffee cup overhead
- Add TID HEP shoulder 4 quadrant AAROM as tolerated with brace on unless pain free
  - Pulleys, table slides, wall climbs, supine wand exercises in all planes

Phase 4: Appx Week 10-14 weeks (following clinical fracture healing)

- Add shoulder AROM, PROM as tolerated
- Generalized UE strengthening
- Activities as tolerated (if bony healing complete)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/humeral shaft/









### Humeral Shaft Fracture - ORIF

#### Three times per day home exercise program including:

#### Phase 1: Week 0-6

- Sling as needed for comfort, wean as able
- Elbow, wrist, finger A/AA/PROM
- Shoulder 4-quadrant AAROM
  - OK for wall climbs, table slides, pulleys, supine wand exercises all planes
- Rhomboid and periscapular isometrics, posture exercises
- Weight bear as tolerated for ambulation
  - No lifting > coffee cup overhead

#### Phase 2: Week 6-12 weeks (following clinical fracture healing)

- Discontinue sling altogether
- Phase I and II rotator cuff strengthening as tolerated
- Periscapular, complete extremity, core strengthening
- No lifting >5# overhead

#### Phase 3: Week 12-16

- Activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/humeral shaft/









### Distal Humerus Fracture – ORIF

#### Three times per day home exercise program:

#### Goal: Avoid fracture displacement but obtain max ROM by 3 months post-operatively

#### Phase 1: Week 0-6

- Sling as needed for comfort
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm pronation / supination A/AA/PROM
- TID elbow motion
  - o If olecranon osteotomy: A/AAROM flexion, P/AAROM gravity assisted extension
  - o If NO olecranon osteotomy: Active, Active assist, gentle PROM flexion and extension
- Avoid varus force at the elbow
  - Keep elbow tucked at the side for all activities
  - o Avoid holding the elbow out and away from the body (abduction at the shoulder)
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Discontinue sling altogether
- Advance to more aggressive elbow AAROM, PROM static progressive stretches (no restrictions)
  - Static progressive splinting if needed
- Add 4 quadrant shoulder A/AA/PROM as tolerated
- No lifting >5# at the side or >coffee cup overhead

#### Phase 3: Week 12-24 weeks

- Activities as tolerated
- Generalized unrestricted strengthening
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment



#### More info: twincities should erandel bow.com/distal humerus/

\*If ROM is not full (or at least 30-130°) by 3 months post-operative, the patient may benefit from manipulation under anesthesia. If this is a risk for not meeting this goal please contact Dr. Myeroff's office, consider dynamic progressive splinting, and educate the patient on the importance of urgent gains.



Page 40







### Medial Epicondyle Fracture – ORIF

#### Three times per day home exercise program:

#### Phase 1: 0-6 weeks

- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
  - o Icing 20min per hour
- A/AA/PROM elbow, wrist fingers TID
- Precautions
  - No lifting >coffee cup
  - o NO resisted wrist flexion or pronation, avoid functional valgus (throwing / racquet sport)
  - Use wrist brace full time except for hygiene exercises ROM exercises

#### Phase 2: 6-12 weeks

- Generalized flexor-pronator, mobile wad, wrist stretching
  - o Begin gentle strengthening after fracture healing (6-8 weeks)
- Eval and treat with additional modalities as indicated
  - OK for putty, desensitization
- Precautions
  - No lifting >5#
  - NO resisted wrist flexion or pronation >2#
  - avoid functional valgus (throwing / racquet sport) until fracture healing appx 8 wks
  - Wean from wrist brace
    - Except for work and dangerous activities

#### Phase 2: 12-18 weeks

- Generalized strengthening, Activities as tolerated
- Independent home exercise program, unrestricted strengthening
  - o Begin return to throwing program for throwers
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/distal humerus/











### <u>Olecranon Fracture – Non-Operative</u>

#### Three times per day home exercise program:

#### Goal: Avoid fracture displacement but obtain max ROM by 3 months post-operatively

#### Phase 1: Week 0-2

- Long arm splint in 45-60° of extension
- Sling full time except for TID finger range of motion, axillary cares, pendulum hangs
- Edema control: Elevate above heart on pillows while supine

#### Phase 2: Week 2-6

- Sling as needed for comfort
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm (pronation / supination) A/AA/PROM
- TID elbow motion
  - A/AAROM elbow flexion, P/AAROM gravity assisted elbow extension (triceps protection)
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- No lifting > coffee cup. No elbow extension against resistance (pushing)

#### Phase 3: Week 6-12 weeks

- Wean from sling
- Add elbow AAROM
- Add biceps and triceps isometrics
- No elbow extension against resistance (pushing)

#### Phase 4: Week 12+

- Advance to more aggressive elbow A/AA/PROM
- Add 4 quadrant shoulder A/AA/PROM as needed
- Strengthening as tolerated, Activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

#### More info: twincities should erandel bow.com/ole cranon/

\*If ROM is not full (or at least 30-130°) by 3 months post-operative, the patient may benefit from manipulation under anesthesia. If this is a risk for not meeting this goal please contact Dr. Myeroff's office, consider dynamic progressive splinting, and educate the patient on the importance of urgent gains.









#### Olecranon Fracture - ORIF

#### Three times per day home exercise program:

#### Goal: Avoid fracture displacement but obtain max ROM by 3 months post-operatively

#### Phase 1: Week 0-6

- Sling as needed for comfort
- Edema control:
  - Compressive stocking
  - o Elevate above heart on pillows while supine
- TID finger, wrist, forearm (pronation / supination) A/AA/PROM
- TID elbow motion
  - o A/AAROM elbow flexion, P/AAROM gravity assisted elbow extension
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- No lifting > coffee cup
- No elbow extension against resistance (pushing)

#### Phase 2: Week 6-12 weeks

- Discontinue sling altogether
- Advance to more aggressive elbow A/AA/PROM
- Add 4 quadrant shoulder A/AA/PROM as needed
- No lifting >5# at the side or >coffee cup overhead

#### Phase 3: Week 12-16 weeks

- Activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

#### More info: twincities should erandel bow.com/ole cranon/

\*If ROM is not full (or at least 30-130°) by 3 months post-operative, the patient may benefit from manipulation under anesthesia. If this is a risk for not meeting this goal please contact Dr. Myeroff's office, consider dynamic progressive splinting, and educate the patient on the importance of urgent gains.









### Radial Head Fracture – Non-operative

### Three times per day home exercise program: Goal: obtain full motion while protecting the bones and ligaments while they heal

#### Phase 1: Week 0-6

- Sling for 0-2 weeks
  - \*No splint recommended
  - o OK to use sling up to 6 weeks sparingly at work or in dangerous situations only
- Edema control:
  - OT or clinic provided compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm elbow A/AA/PROM with the elbow tucked at the side:
  - Elbow Flexion
  - Extension (with the forearm in pronation)
  - Pronation / Supination with the elbow flexed to 90°
- Rhomboid, periscapular, biceps/triceps isometrics, posture exercises, pendulum hangs
- No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from sling entirely
- Add 4 quadrant shoulder A/AA/PROM as needed
- Static progressive splinting OK if needed once fracture healed

#### Phase 3: Week 12-16 weeks

- Generalized strengthening. Activities as tolerated (if ROM adequate and healed)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/radialhead/











### Radial Head Fracture - Operative (ORIF / Arthroplasty)

### Three times per day home exercise program: Goal: obtain full motion while protecting the bones and ligaments while they heal

#### Phase 1: Week 0-6

- Sling x 6 weeks except for hygiene and TID therapy
  - o Post-operative splint with forearm in 60° supination x 0-2 weeks
  - Followed by OT custom night splint only (90°flexion, 60° supination)
- Edema control:
  - OT or clinic provided compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist ROM
- TID elbow A/AA/gentle PROM with the elbow tucked at the side:
  - Flexion
  - Extension (with the forearm in pronation)
  - o Pronation / Supination with the elbow flexed to 90°
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- LUCL Protection Precautions
  - Avoid varus force at the elbow
    - Keep elbow tucked at the side of the body for all activities
    - Avoid holding the elbow out and away from the body (active abduction or FF at the shoulder)
  - Avoid supination while elbow is in extension
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from sling and night splint
- Add 4 quadrant shoulder A/AA/PROM as needed
- Advance aggression on TID elbow wrist finger A/AA/PROM (focusing on supination at 90°)
  - Static progressive splinting OK if needed
- Continue above precautions

#### Phase 3: Week 12-16 weeks

- Add generalized strengthening. Activities as tolerated (if ROM adequate and healed)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/radialhead/



Page 45







#### Terrible Triad Fracture Dislocation - ORIF

#### Three times per day home exercise program:

#### Goal: obtain full motion while protecting the lateral elbow ligament while it heals

#### Phase 1: Week 0-6

- Sling x 6 weeks except for hygiene and TID therapy
  - o Post-operative splint with forearm in 60° supination x 0-2 weeks
  - Followed by OT custom night splint (90°flexion, 60° supination)
- Edema control:
  - o OT or clinic provided compressive stocking
  - o Elevate above heart on pillows while supine
- TID finger, wrist ROM
- TID elbow A/AA/gentle PROM with the elbow tucked at the side:
  - Flexion
  - Extension (with the forearm in pronation)
  - Pronation / Supination with the elbow flexed to 90°
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- LUCL Protection Precautions
  - Avoid varus force at the elbow
    - Keep elbow tucked at the side of the body for all activities
    - Avoid holding the elbow out and away from the body (active abduction or FF at the shoulder)
  - Avoid supination while elbow is in extension
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from sling and night splint
- Add 4 quadrant shoulder A/AA/PROM as needed
- Advance aggression on TID elbow wrist finger A/AA/PROM (focusing on supination at 90°)
  - Static progressive splinting OK if needed
- Continue above precautions

#### Phase 3: Week 12-16 weeks

- Add generalized strengthening. Activities as tolerated (if ROM adequate and healed)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/terrible triad/









### Elbow Dislocation – Operative and Non-operative

## Three times per day home exercise program: Goal: obtain full motion while protecting the elbow ligaments while they heal

#### Phase 1: Week 0-6

- Splint for 0-2 weeks
- Sling x 6 weeks as needed except for hygiene and TID therapy
- Edema control:
  - OT or clinic provided compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm elbow A/AAROM with the elbow tucked at the side:
  - o Elbow Flexion
  - Extension (with the forearm in pronation)
  - o Pronation / Supination with the elbow flexed to 90°
- Rhomboid, periscapular, biceps/triceps isometrics, posture exercises, pendulum hangs
- Lateral ligament precautions:
  - Avoid varus force at the elbow
    - Keep elbow tucked at the side of the body for all activities
    - Avoid holding the elbow out and away from the body (active abduction or FF at the shoulder)
  - o Avoid supination while elbow is in extension
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from sling entirely
- Add 4 guadrant shoulder A/AA/PROM as needed
- Add elbow and forearm PROM
  - Static progressive splinting OK if needed
- Add wrist, forearm and elbow gentle strengthening
- Continue above precautions (especially avoiding varus at the elbow)

#### Phase 3: Week 12-16 weeks

- Generalized strengthening. Activities as tolerated (if ROM adequate and healed)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/elbowdislocation/









### Lateral Ulnar Collateral Ligament (LUCL) - Reconstruction or Repair

## Three times per day home exercise program: Goal: obtain full motion while protecting the elbow ligaments while they heal

#### Phase 1: Week 0-6

- Splint for 0-2 weeks
- Sling x 6 weeks as needed except for hygiene and TID therapy
- Edema control:
  - OT or clinic provided compressive stocking
  - o Elevate above heart on pillows while supine
- TID finger, wrist, forearm elbow A/AAROM with the elbow tucked at the side:
  - o Elbow Flexion
  - Extension (with the forearm in pronation)
  - o Pronation / Supination with the elbow flexed to 90°
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- Biceps and Triceps isometrics with the elbow at 90° flexion
- Precautions
  - Avoid varus force at the elbow
    - Keep elbow tucked at the side of the body for all activities
    - Avoid holding the elbow out and away from the body (active abduction or FF at the shoulder)
  - Avoid supination while elbow is in extension
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from sling entirely
- Add 4 quadrant shoulder A/AA/PROM as needed
- Add elbow and forearm PROM
- Add wrist, forearm and elbow gentle strengthening
- Continue above precautions (especially avoiding varus at the elbow)

#### Phase 3: Week 12-16 weeks

- Generalized strengthening, activities as tolerated (if ROM adequate)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/PLRI/











### Ulnar Collateral Ligament (UCL) - Non-Operative

#### Three times per day home exercise program:

#### Goals:

- 1) Obtain ROM while ligament "heals"
- 2) Wrist, forearm, core strengthening
- 3) Return to competitive sport

#### Phase 1: Week 0-6

- Splint for 0-2 weeks
- Sling x 6 weeks as needed except for hygiene and TID elbow wrist and finger ROM
- Edema control:
  - OT or clinic provided compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm elbow A/AAROM
- Rhomboid, periscapular, biceps/triceps isometrics, posture exercises, pendulum hangs
- Once pain resolved, add grip, flexor pronator and mobile wad light strengthening
- Precautions
  - Avoid functional valgus (no pushing or throwing)
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Begin if patient is asymptomatic to functional valgus (moving valgus stress test)
- Add 4 quadrant shoulder A/AA/PROM as needed
- Add elbow and forearm PROM
- Add wrist, forearm and elbow progressive strengthening
  - Additional focus on flexor pronators
- Precautions
  - Avoid functional valgus (no pushing or throwing) until asymptomatic

#### Phase 3: Week 12+

- Progressive unrestricted strengthening, core conditioning
- Initiate return to sport / throwing program once asymptomatic and strengthening complete
  - o Goal return to competition at 3-4 months

More info: twincities should erandel bow.com/tommyjohn/











### Ulnar Collateral Ligament (UCL) - Tommy John Reconstruction

#### Three times per day home exercise program:

#### Goals:

- 4) Obtain ROM while protecting repair
- 5) Wrist and forearm strengthening
- 6) Return to competitive sport

#### Phase 1: Week 0-6

- Splint for 0-2 weeks
- Sling x 6 weeks as needed except for hygiene and TID therapy
- Edema control:
  - OT or clinic provided compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm elbow A/AAROM
- Rhomboid, periscapular biceps/triceps isometrics, posture exercises, pendulum hangs
- Precautions
  - Avoid functional valgus (no pushing or throwing)
  - No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Add 4 quadrant shoulder A/AA/PROM as needed
- Add elbow and forearm PROM
- Add wrist, forearm and elbow gentle strengthening
  - Include flexor pronators
- Precautions
  - o Avoid functional valgus (no pushing or throwing)
  - No lifting > 5#

#### Phase 3: Week 12-16 weeks

- Progressive unrestricted strengthening
- Core conditioning
- Initiate return to sport / throwing program at 4 mo post-op
  - o Goal return to competition at 10 months

More info: twincities should erandel bow.com/tommyjohn/











### Monteggia Fracture Dislocation-ORIF

#### Three times per day home exercise program:

#### Goal: Avoid fracture displacement but obtain max ROM by 3 months post-operatively

#### Phase 1: Week 0-6

- Sling as needed for comfort
  - o OT provided night splint only in 90° of flexion and 60° supination.
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist ROM
- TID elbow motion
  - A/AAROM elbow flexion
  - o P/AAROM gravity assisted elbow extension with the forearm in pronation
  - o Pronation / Supination with the elbow flexed to 90°
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- Precautions
  - Avoid varus force at the elbow
    - Keep elbow tucked at the side of the body for all activities
    - Avoid holding the elbow out and away from the body (active abduction or FF at the shoulder)
  - Avoid supination while elbow is in extension
  - No lifting > coffee cup, No pushing against resistance

#### Phase 2: Week 6-12 weeks

- Discontinue sling altogether
- Advance aggression on TID elbow wrist finger A/AA/PROM
  - Static progressive splinting OK if needed
- Add 4 guadrant shoulder A/AA/PROM as needed
- Continue above precautions

#### Phase 3: Week 12-16 weeks

- Generalized strengthening, activities as tolerated (once ROM is full)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/ole cranon/











### Elbow Release (Arthroscopic or Open)

#### Three times per day home exercise program:

Phase 0: Same and next day therapy session

- \*(while regional block is active)
- Fabricate removable terminal extension night splint
- Therapist assisted unrestricted PROM

#### Phase 1: 0-12 weeks

- Sling as needed for comfort (wean out completely by 2 weeks)
- Wear extension splint nightly
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- Finger, wrist, forearm, elbow unrestricted A/AA/PROM
  - OK for static progressive splinting as indicated
- Precautions
  - o Weight bearing as tolerated

#### Phase 2: 12-18 weeks

- Activities as tolerated (if ROM adequate and pain free)
- Independent home exercise program, unrestricted strengthening
  - o Coaching to work on motion for another 3 months at home.
- Return to high level functional ADLs and simulation of work environment



#### More info: twincities should erandel bow.com/elbowstiffness/

\*If ROM is not full (or at least 30-130°) by 3 months post-operative, the patient may benefit from manipulation under anesthesia. If this is a risk for not meeting this goal please contact Dr. Myeroff's office, consider dynamic progressive splinting, and educate the patient on the importance of urgent gains.









### Total Elbow Arthroplasty

#### Three times per day home exercise program:

Prehab: 0-6 weeks pre-operative appointment to establish care and coaching on:

- Set expectations and training on recovery, exercises and restrictions, sling donning and doffing
- Work and home evaluation / modifications including ADLs, hygiene, sleep, equipment

#### Phase 1: 0-2 weeks

- Sling as needed for comfort (wean out completely by 2 weeks)
- · Splint full time for wound protection.
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- Finger ROM exercises, pendulum hangs and axillary cares
- Precautions
  - \*\*\*If triceps repaired, avoid resisted elbow extension for 12 weeks
  - Coaching on lifelong lifting restrictions:
    - No more than 2# repetitive or 5# one time weightbearing
    - Avoid varus at the elbow (lifting with the shoulder in abduction)

#### Phase 2: 2 weeks (initiated once splint removed)

- · Wean from sling
- Continue edema control
- · Activities as tolerated within above restrictions
- Home exercise program
  - o A/AA/Gentle PROM elbow flexion/extension, pronation/supination
  - A/AA/PROM elbow wrist and fingers
  - o Gentle shoulder A/AAROM as needed

More info: twincities should erandel bow.com/elbowarthritis/











### Lateral Epicondylitis (Tennis Elbow) – Non-Operative

#### Three times per day home exercise program:

#### Phase 1: 0-12 weeks

- Generalized flexor-pronator, mobile wad, wrist stretching and strengthening
  - Use a hammer or similar object
- Eval and treat with additional modalities as indicated
  - o OK for Iontophoresis, dry needling, acupuncture, desensitization
- Precautions would include avoiding heavy lifting (more than 5 pounds repetitive)
  - Especially avoid heavy resisted wrist extension and supination
  - Elbow strap as needed
  - Use wrist brace
    - Most of the day while active
    - Especially during any high demand activities
    - Remove for hygiene, therapy, sleep
- Couple this period of treatment with an anti-inflammatory protocol if medically tolerable:
  - Scheduled ibuprofen (600mg TID) if not contraindicated
  - Ice massage for 30 minutes 3 times per day over the lateral epicondyle
    - Optional nitroglycerine patches daily to the lateral epicondyle if prescribed

#### Phase 2: 12-24 weeks

- Wean from wrist brace except for when lifting >5#
- Generalized UE strengthening
- Activities as tolerated (if ROM adequate and pain free)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- Return to Dr. Myeroff for consideration of PRP injection, TENEX or surgery if still symptomatic



More info: twincities should erandel bow.com/tennisel bow/









### Lateral Epicondylitis (Tennis Elbow) – Operative

#### Three times per day home exercise program:

#### Phase 1: 0-6 weeks

- Gentle flexor-pronator, mobile wad, wrist stretching
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- Precautions
  - No lifting >coffee cup
  - NO resisted wrist extension and supination
  - Use wrist brace full time except for hygiene exercises ROM exercises
- Scheduled icing 30 minutes 3 times per day over the lateral epicondyle
  - o Transition to ice massage starting at 2 weeks once wound is healed

#### Phase 2: 6-12 weeks

- Wean from wrist brace except for work and household activities
- Generalized flexor-pronator, mobile wad, wrist stretching and strengthening
  - Use a hammer or similar object
- Eval and treat with additional modalities as indicated
  - o OK for Iontophoresis, dry needling, acupuncture, desensitization
- Precautions
  - No lifting >5#
  - NO resisted wrist extension and supination >2#
  - Wean from wrist brace
    - Except for work and household activities
    - Remove for hygiene, ROM exercises, sleep

#### Phase 2: 12-18 weeks

- Generalized strengthening, activities as tolerated.
- Independent home exercise program, unrestricted strengthening
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/tennisel bow/









### Medial Epicondylitis (Golfer's Elbow) – Non-Operative

#### Three times per day home exercise program:

#### Phase 1: 0-12 weeks

- Generalized flexor-pronator, mobile wad, wrist stretching and strengthening
  - Use a hammer or similar object
- Eval and treat with additional modalities as indicated
  - OK for Iontophoresis, dry needling, acupuncture, desensitization
- Precautions would include avoiding heavy lifting (more than 5 pounds repetitive)
  - o Especially avoid heavy resisted wrist flexion and pronation
  - OK for elbow strap as needed
  - Use wrist brace
    - Most of the day while active
    - Especially during any high demand activities
    - Remove for hygiene, therapy, sleep
- Couple this period of treatment with an anti-inflammatory protocol if medically tolerable:
  - Scheduled ibuprofen (600mg TID) if not contraindicated
  - Ice massage for 30 minutes 3 times per day over the lateral epicondyle
    - Optional nitroglycerine patches daily to the lateral epicondyle if prescribed

#### Phase 2: 12-24 weeks

- Wean from wrist brace except for when lifting >5#
- Generalized UE strengthening
- Activities as tolerated (if ROM adequate and pain free)
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment
- Return to Dr. Myeroff for consideration of PRP injection, TENEX or surgery if still symptomatic



More info: twincities should erandel bow.com/golfersel bow/









### Medial Epicondylitis (Golfer's Elbow) - Operative

#### Three times per day home exercise program:

#### Phase 1: 0-6 weeks

- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- Gentle flexor-pronator, mobile wad, wrist stretching
- Precautions
  - No lifting >coffee cup
  - NO resisted wrist flexion or pronation
  - Use wrist brace full time except for hygiene exercises ROM exercises
- Scheduled icing 30 minutes 3 times per day over the medial epicondyle
  - Transition to ice massage starting at 2 weeks once wound is healed

#### Phase 2: 6-12 weeks

- Wean from wrist brace except for work and household activities
- Generalized flexor-pronator, mobile wad, wrist stretching and strengthening
  - Use a hammer or similar object
- Eval and treat with additional modalities as indicated
  - o OK for Iontophoresis, dry needling, acupuncture, desensitization
- Precautions
  - No lifting >5#
  - NO resisted wrist flexion or pronation >2#
  - Wean from wrist brace
    - Except for work and household activities
    - Remove for hygiene, ROM exercises, sleep

#### Phase 2: 12-18 weeks

- Generalized strengthening, Activities as tolerated.
- Independent home exercise program, unrestricted strengthening
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/golfersel bow/











### Distal Biceps Repair

Phase 1: 0-2 weeks

- Splint 0-2 weeks
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine

Phase 2: 2-12 weeks

- Edema control
- Finger, wrist, forearm, elbow A/AA/PROM
- Precautions
  - No lifting >coffee cup
  - o NO resisted elbow flexion or supination

Phase 3: 12-18 weeks

- Gentle biceps and triceps strengthening
  - Use a hammer or similar object
- Generalized strengthening, activities as tolerated (if ROM adequate and pain free)
- Independent home exercise program, unrestricted strengthening
- Return to high level functional ADLs and simulation of work environment



More info: twincities should erandel bow.com/distabliceps/









### **Cubital Tunnel Release**

#### Phase 1: 0-2 weeks

- Leave soft dressings in place, or remove after POD#3 and replace with compression sleeve
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- Activities and ROM as tolerated

#### Phase 2: 2-6 weeks

- Edema control, desensitization, dexterity
- Scar management
- Finger, wrist, forearm, elbow A/AA/PROM
- Progressive strengthening
- Activities and ROM as tolerated



More info: twincities should erandel bow.com/cubital tunnel/









#### Forearm Fracture - ORIF

#### Three times per day home exercise program:

#### Phase 1: Week 0-6

- Sling as needed for comfort x 2 weeks, then wean from sling
- Edema control:
  - Compressive stocking
  - Elevate above heart on pillows while supine
- TID finger, wrist, forearm, elbow pronation / supination A/AA/PROM
  - Consider OT provided removable night splint in 60° supination
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- No lifting > 5#, no pushing or pulling against resistance

#### Phase 2: Week 6-12 weeks

- Advance to more aggressive elbow A/AA/PROM
- Add 4 quadrant shoulder A/AA/PROM as needed
- No lifting >10#

#### Phase 3: Week 12-16 weeks

- · Generalized strengthening, activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment











### Distal Radius Fracture – Non-op

#### Three times per day home exercise program:

#### Phase 1: Week 0-6

- Sling as needed for comfort
- Edema control:
  - Elevate above heart on pillows while supine
- TID finger, elbow A/AA/PROM
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs
- Modalities as indicated
- No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Removable wrist brace to be worn as needed
  - o Remove for TID therapy and hygiene
- Advance to A/AA/PROM fingers, wrist, forearm and elbow
- Gradual strengthening, putty, isometrics
- Add desensitizing, mirror therapy, dexterity exercises as needed
  - Modalities as indicated
- Add 4 quadrant shoulder A/AA/PROM as needed
- No lifting >5#

#### Phase 3: Week 12-16 weeks

- Generalized strengthening, activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

More info: twincities should erandel bow.com/distal radius/











### Distal Radius Fracture – ORIF

#### Three times per day home exercise program:

#### Phase 1: Week 0-6

- Sling as needed for comfort
  - o Removable splint x 6 weeks except for TID HEP and hygiene
- Edema control:
  - Elevate above heart on pillows while supine
- TID A/AA/PROM fingers, elbow
- TID A/AAROM wrist and forearm
- Rhomboid and periscapular isometrics, posture exercises, pendulum hangs, shoulder ROM
- Gentle scar massage, silicone pads
- Modalities as indicated
- No lifting > coffee cup

#### Phase 2: Week 6-12 weeks

- Wean from brace
- Advance to PROM wrist and forearm
- Gradual strengthening, putty, isometrics
- Continue scar massage, silicone pads
- Add desensitizing, mirror therapy, dexterity exercises as needed
  - Modalities as indicated
- No lifting >5#

#### Phase 3: Week 12-16 weeks

- Generalized strengthening, activities as tolerated
- Independent home exercise program
- Return to high level functional ADLs and simulation of work environment

**1** € 1

More info: twincities should erandel bow.com/distal radius/

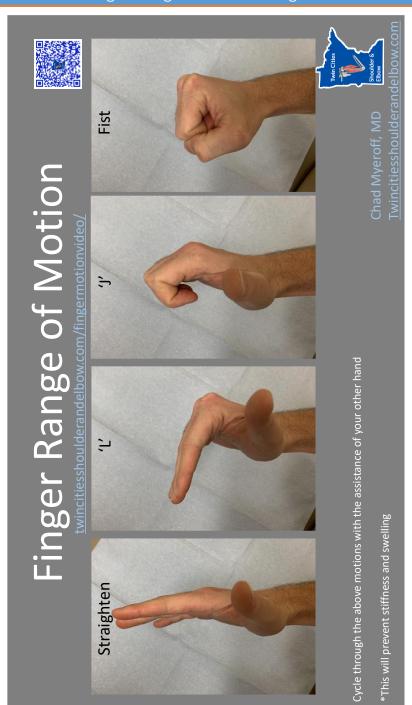








### Finger Range of Motion Diagram













### Elbow Elevation Technique Diagram













### Standard Elbow Range of Motion Diagram













### LUCL Protection Elbow Range of Motion Diagram













### Shoulder Range of Motion Diagram





