

Shoulder Rehabilitation



Steve Kane, MD
Chairman, AMC Residency

Rehabilitation in many cases is as important as the surgery



"A lack of good physical therapy can absolutely make a good surgeon look bad"

The Balancing Act

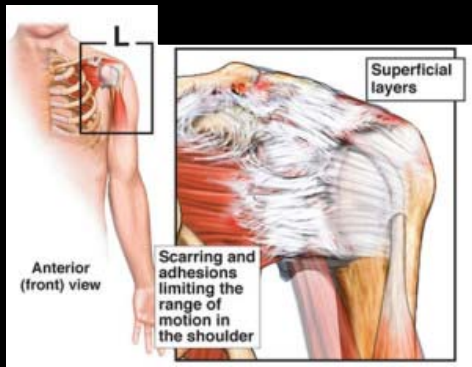
Do I move them too soon and risk something coming apart?



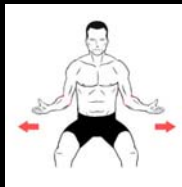
Do I move too late and risk the shoulder becoming stiff and problematic

What you are trying to avoid

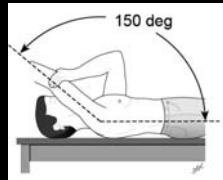




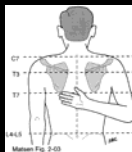
The two most important areas



- External rotation
- Forward elevation



Internal Rotation is Icing on the Cake




General Rehabilitation Rules
Divide Rehab into three phases
Day 1 - 3 weeks
MOTION PHASE

- Arm Immobilizer
- Wrist/hand/finger exercises
- Elbow flex/ext, pro/supination
- Shoulder girdle exercises
- Scapula setting exercises
- **Passive** ROM in all directions as tolerated
- **Do not force or stretch**




Motion Early Strengthening Phase
3-6 weeks

- Gentle **isometric** exercises in neutral as pain allows
- Wean off sling
- Begin active assisted exercises ensuring **glenohumeral movement**, not scapulothoracic
- Do not force or stretch



Strengthening and End Range of Motion Phase
6 weeks and beyond

- **Progress to full active exercises in all ranges**
- Begin rotator cuff strengthening
- Closed chain exercises
- Begin stretching the capsule
- Begin proprioceptive exercises



Milestones

- 4 Weeks
50% pre op passive ROM
- 6 Weeks
Passive ROM 50 - 100 %
of pre op level
- 12 Weeks
Active ROM 50 -100 %
to pre op level

Passive ROM equal to
pre op level



Fracture Specific Rehabilitation



Hemiarthroplasty / ORIF The **Tuberosities** Are the Worry for Aggressive Motion

Day 1 - 3 weeks

- Occupational Therapy
- Abduction sling with body belt
- Wrist/hand/finger exercises
- Elbow flex/ext, pro/supination
- Shoulder girdle exercises
- **Scapula setting exercises**
- **Pendulum exercises**
- Passive ROM in all directions as tolerated
- Remain in sling



Level 1 exercises

Hemiarthroplasty / ORIF 3 to 6 weeks

- Do not force or stretch
- Gentle isometric exercises in neutral as pain allows
- Wean off sling
- Begin active assisted exercises ensuring glenohumeral movement, not scapulothoracic.






Level 2 exercises








Hemiarthroplasty/ORIF greater than 6 weeks


- Begin active assisted exercises
- Progress to full active exercises in all ranges
- Begin rotator cuff strengthening (pain free)
- Closed chain exercise
- Begin stretching the capsule
- Begin proprioceptive exercises
















Level 3 exercises


RSA Level 1 Week 1


If you are less concerned about Tuberosities, this gets a lot easier

- Body belt removed / sling for comfort
- Handing gripping exercise
- Pendulum exercises
- Passive flexion, abduction, internal and external rotation
- Scapular setting and posture correction
- May perform ADL below shoulder level, such as eating and writing









Level 1 exercises

RSA 1 to 6 weeks

Level 2 exercises

Active assisted flexion, abduction, internal and external rotation in supine and progress to sitting position as soon as the patient is able.

Progress to active when possible

Begin isometric strengthening of all muscle groups



RSA Beyond 6 weeks

Progress to levels 3 exercises

Encourage active movement into all ranges with some gentle self-stretching at the end of range. Progress isotonic strengthening through range

Regularly stretch the joint to the end of its available range

The Pulley

Probably a level 1.5 exercise
Easily obtained
We treat a fair amount of people with little or no insurance and so a [rehabilitation booklet](#) is helpful for home therapy



Western Surgery Center



In Clinic Physical Therapy



If at all possible, try and arrange clinic visits which coincide with PT visits.

1. Identified problems sooner
2. Wound checks
3. Customized plans
4. Physician / therapist communication
5. Patients loved seeing physician and therapist at same visit

Phone Calls You Always Answer

- God
- Life Lock
- Your Tax Attorney
- Your Malpractice Attorney
- The Fire / Police Department
- **Your Trusted Physical Therapist**
- Significant other?



Home Kit

- Pulley
- 3 foot stick
- TheraBand
- An instruction manual on exercises to do.



Thanks for acting like you listened