Rehabilitation Programs for Non-Operative Humeral Fractures

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General Principles of Rehabilitation for Fractures
- Treat the patient not the fracture
- Move all joints that are not immobilized
- Prevent disuse atrophy
- Use gravity to assist in mobilizing a joint
- Be aware of peripheral nerve palsy signs
- Avoid exercises which reproduce the mechanism of injury
- Early intervention is the key to a successful recovery

Rehabilitation Program of Non-Operative Shoulder Fractures
- Phase I- Early Mobility
- Phase II- AROM
- Phase III- Strength and Function
- Phase IV- Return to Normal Function

**PHASE I**  Weeks 1-3
- Sling worn during the day and night up to 6 weeks, except for HEP
- Pendulum exercises
- Neck ROM exercises
- Elbow, wrist, and hand ROM exercises
- Scapular exercises-shrugs, squeezes, and PNF
- Passive shoulder ROM exercises in supine
- Pulleys
- Modalities for pain and swelling

**PHASE II**  Weeks 4-6
- Wean from sling and discontinue it if physician allows
- Active shoulder ROM exercises in supine and progress to standing or sitting
- AROM based on radiographic evidence of healing
- Sub-maximal Isometric exercises of the deltoid and rotator cuff muscles
- Continue passive ROM and scapular exercises

**PHASE III**  Weeks 7-9
- Initiate isotonic exercises starting with therabands and progressing to weights after week 8
- Upper extremity PNF
- Concentrate on RTC and scapular strength

**PHASE IV**  Week 10+
- Advanced progressive resistance exercises
- Progress to overhead exercises
- Plyometrics and muscle coordination exercises
- Push end range of motion
- Glenohumeral joint mobilizations