Blake M. Bodendorfer, MD omahasportsdoc.com

Humeral Shaft Open Reduction Internal Fixation (ORIF) PT

Phase 1 (1-3 weeks) Appointments Begin physical therapy after first post-op appointment, 2 x/week Follow up with MD 10-14 days post op **Rehabilitation Goals** Protect repair Minimize pain and swelling Maintain ROM of surrounding joints Prevent adhesive capsulitis Minimize cardiovascular deconditioning Precautions Sling at all times or per MD No AROM, lifting, pushing, pulling x 6 weeks No ER > 40 degrees or excessive shoulder EXT x 6 weeks No supporting of body weight Suggested Therapeutic Exercises PROM of shoulder: Flexion to 90 degrees, ER to 30 degrees, IR to tolerance (no behind back) Scapular clocks: Elevation, depression, retraction, protraction Pendulums (Codman's) Incision mobilization Cervical, hand, wrist, elbow AROM: thumb to shoulder, make fist Cardiovascular Exercises Stationary bike in sling Progression Criteria Per X-ray evidence of healing PROM flexion to 90 degrees, ER to 30 degrees

PHASE II (WEEKS 3-6)

Rehabilitation Goals Regain PROM Gentle functional use

No resistance Precautions Sling and ROM limitations per MD No IR/ER No driving No pushing, pulling, lifting No cuff strengthening Suggested Therapeutic Exercises PROM in scapular plane (no hand behind back IR) AAROM: - flexion to 90 degrees - ER to 40 degrees, Pulleys AROM of elbow, wrist and hand Continue scapular isometrics and clocks Grade I-II GH and scapular mobilizations Cardiovascular Exercises Cardiovascular conditioning in sling per MD UBE no resistance Stationary bike **ROM** limits **Progression Criteria** Per X-ray evidence of healing AAROM flexion to 90 degrees, ER to 40 degrees

PHASE III (WEEKS 6-12)

Rehabilitation Goals **Regain full PROM Precautions** Sling use per MD based on x-ray evidence of healing (DC if progressing) May begin driving 20 lb weight limit No pushing or pulling No overhead activity Suggested Therapeutic Exercises Continue PROM/AAROM/AROM cervical, shoulder, elbow, wrist and hand Pec minor stretching to minimize scapular protraction with flexion Submaximal isometric RTC exercises at 6 weeks Progressive isotonic RTC exercises at 8 weeks, low weights, high reps Grade III-IV GH and scapular mobilizations at 8 weeks Posterior scapular stretching at 8 weeks if needed General UE strengthening at 10 weeks Cardiovascular Exercises UBE with light resistance Stationary bike Swimming per MD **Progression Criteria** Advance to work/sport specific conditioning once AROM is = bilateral and strength is 4+/5 in all directions

PHASE IV (WEEKS 12 +)

Rehabilitation Goals Full ROM in all planes Transition to HEP Precautions Per MD but generally no lifting, pushing or pulling precautions at this point No overhead lifting until 4-6 months post op Suggested Therapeutic Exercises AROM of cervical shoulder, elbow, wrist and hand emphasizing end ROM GH and scapular joint mobilizations as needed Pec minor stretching Posterior capsule stretching Anterior deltoid strength and scapular stabilization General UE strengthening Cardiovascular Exercises No restrictions Progression Criteria DC to HEP