Rehab 3 — One High Standard. Three Local Partners.

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Reverse Shoulder Arthroplasty Protocol

(with subscapularis release)

See last page for patients with special considerations related to surgical approach and procedure

Week one	Weeks two to three
Initial Evaluation	**Evaluate**
➢ Posture and position of the shoulder girdle ➢ Inspect for signs of infection, and ensure integrity of the incision ➢ PROM (after resolution of interscalene block)	➢ Posture and position of the shoulder girdle ➢ Continue inspection of incision ➢ PROM
Patient Education	**Patient Education**
➢ Sling use is typically 2-3 weeks ➢ Discuss frequency and duration of treatment (2x/wk for 12-16 weeks is anticipated) **<u>Discuss precautions:</u>** ➢ **Do not combine ADD/IR/EXT for 6 weeks (Patient to be able to see their elbow while lying in supine)** ➢ **Avoid excessive stretching/sudden movement** ➢ **Minimize support of body weight with arm** ➢ **Avoid tucking shirt in, reaching for wallet, or donning bra behind back for 6 weeks** ➢ **Patient should not push up from seated position while in GH EXT**	➢ Continue sling use ➢ Educate patient regarding posture and position of the shoulder girdle, changes in shoulder mechanics as it relates to the intention of this surgery ➢ Patients may return to driving once off all narcotics, able to perform ADL's pain free, and patient feels safe to do so ➢ Continue reminders regarding precautions as the patient begins to use their involved arm more freely and frequently
Therapeutic Exercise	**Therapeutic Exercise**
➢ Initiate submaximal pain free periscapular and deltoid isometrics (avoid EXT beyond neutral) ➢ AROM c-spine, elbow, wrist, and hand	➢ Continue submaximal pain free isometrics ➢ Continue AROM c-spine, elbow, wrist, and hand ➢ Initiate AAROM exercises
Manual Techniques	**Manual Techniques**
➢ Initiate PROM to include elevation, IR, and ER to tolerance in plane of scapula ➢ **Support arm in neutral after PROM (Avoid IR against abdomen or EXT to bed)**	➢ Continue PROM as stated ➢ May initiate gentle mobilization and desensitization of incision when appropriate
Modalities	**Modalities**
➢ Cryotherapy for the first 72 hrs	➢ Frequent cryotherapy (4-5x/day x 10-15 min)
Goals	**Goals**
➢ Prevent dislocation/promote healing of soft tissue ➢ Ensure patient and family understand precautions as they relate to bed mobility, transfers, and other ADL's ➢ Initiate/enhance PROM	➢ Prevent dislocation/promote healing of soft tissue ➢ Confirm adherence to precautions by patient and family ➢ Progress PROM ➢ Return to self feeding and light ADL's

Weeks three to six	Weeks six to eight
Evaluate	**Evaluate**
➢ Posture and position of the shoulder girdle ➢ PROM of the shoulder	➢ Posture and position of the shoulder gridle ➢ PROM of the shoulder
Patient Education	**Patient Education**
➢ Wean from sling (utilize sling only when out in the community and during sleep) ➢ Emphasize postural alignment when out of sling ➢ Continue reminders regarding precautions as the patient begins to use their involved arm more freely and frequently	**Discuss long term precautions:** ➢ **Activities involving impact or sudden start/stops shall be avoided including but not limited to: wood chopping, hammering, pull cord starters, and sawing wood by hand**
Therapeutic Exercise	**Therapeutic Exercise**
➢ May add resisted elbow, wrist, and hand exercises ➢ Continue/progress periscapular and deltoid isometrics ➢ Initiate AROM Isotonic exercises no resistance (prone row, extension to neutral, sidelying ER with towel roll, and cane press/serratus punch) ➢ Consider progression of active elevation (plane of scapula) beginning in supine and working towards upright positions	➢ Initiate UBE in standing no resistance/pain free (may not be appropriate until 8 weeks for some patients) ➢ Progress isotonics to include small weights ➢ Initiate light theraband exs in standing (rows, and straight arm extension) ➢ May now include light resisted IR/ER ➢ **Attempts should be made to complete exercises in positions which require reflexive trunk stabilization prior to extremity movement (limit seated exercises if able)**
Manual Techniques	**Manual Techniques**
➢ Continue PROM, initiate IR PROM at 6 weeks (in scapular plane, gently) ➢ Continue gentle mobilization and desensitization of incision as appropriate ➢ May initiate Scapulothoracic mobilization as appropriate Gr I/II ➢ Initiate gentle rhythmic stabilization (alternating isometrics) in supine	➢ Continue PROM ➢ Utilize scapulothoracic mobilization as needed ➢ Progress rhythmic stabilization
Modalities	**Modalities**
➢ Any as indicated	➢ Any as indicated
Goals	**Goals**
➢ Prevent dislocation/promote healing of soft tissue ➢ Return to normal completion of basic ADL's (dressing, feeding, hygiene) ➢ Ensure continued adherence to precautions by patient and family through week 6 ➢ Return to self feeding and light ADL's ➢ PROM goals: *scapular plane elevation to 120 degrees *ER in scapular plane to 30 degrees	➢ PROM goals: *scapular plane elevation 140 degrees *ER in the scapular plane to 40 degrees ➢ AROM goals: *elevation to 90 degrees

Weeks eight to twelve	Weeks twelve to discharge
Evaluate	**Evaluate**
➢ Posture and position of the shoulder girdle ➢ PROM ➢ AROM ➢ Assess functional expectations (RTW/sport)	➢ PROM ➢ AROM ➢ Strength ➢ Deficits that may limit return to work or sport goals
Patient Education	**Patient Education**
➢ Reiterate long term precautions ➢ May initiate discussion related to potential return to sport (see weeks 12 to D/C)	**Discuss return to sport:** ➢ **Sports with fall potential and impact should be avoided, including but not limited to: downhill skiing, tennis, basketball, soccer, weighlifting, waterskiing, and volleyball** ➢ **Gradual return to walking, jogging, running, stationary cycling, and ballroom dancing is allowed** ➢ **Low impact aerobics, golf, swimming, and table tennis shall be decided on an individual basis and require consideration from the physician**
Therapeutic Exercise	**Therapeutic Exercise**
➢ Progress isotonics as appropriate to include shoulder height activity based on patient presentation and tolerance ➢ Incorporate low level loading and trunk stabilization as able (wall push up) ➢ May incorporate rhythmic stabilization in standing at shoulder height	➢ Progress loading activity (table push up or plank at an angle) ➢ Progress exercises to shoulder height and above ➢ Progress to work and sport specific activity ➢ Encourage participation in the CFA
Manual Techniques	**Manual Techniques**
➢ Any manual techniques as indicated	➢ Any manual techniques as indicated
Modalities	**Modalities**
➢ Any as indicated	➢ Any as indicated
Goals	**Goals**
➢ PROM goals: *scapular plane elevation 160 degrees *ER in the scapular plane to 60 degrees ➢ AROM goals: *elevation to 120 degrees *functional ER to 30 degrees	➢ Return to work or sport ➢ Independence with HEP ➢ Independence with long term precautions ➢ AROM goals: *elevation to 140 degrees *functional ER to 40 degrees

Special Considerations
Subscapularis osteotomy
➢ Patients undergoing reverse total shoulder arthroplasty via Dr. Parsons will not have the subscapularis muscle osteotomized or repaired in any fashion. However, for patients from outside referral sources, please be aware that treatment of this population is drastically different depending on repair vs. release of the subscapularis. Therapist should seek advice and protocol information from the referring surgeon in these cases
Resurfacing
➢ resurfacing or "ream and run" procedures will follow the TSA protocol
Revision surgeries
➢ Sling use for 6 weeks post-op ➢ PROM to be initiated 3-6 weeks post-op ➢ Initiation of AROM and isotonics may require a 1-2 week delay from the basic reverse total shoulder protocol putting it in the 5 week timeframe based on patient presentation and MD discretion
Superior approach
➢ A superior approach is used in TSA cases where sparing the subscapularis is preferred. This approach causes greater damage to the deltoid. As a result, deltoid activity is delayed in favor of early rotator cuff rehabilitation. We are still exploring rehab details with this procedure and will likely need a protocol created in the future. For now, expect delays in deltoid activation and look to the treating surgeon for details on a case by case basis.

References

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Created 10/29/13