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## Osteochondral Allograft Rehabilitation Guidelines

Progression is based on healing constraints and functional progression specific to the patient. Phases and time frames are designed to give a general sense of progression. If the patient also had other procedures, the most conservative protocol takes precedence. If the guidelines below need to be altered, that will be included on the PT script. Please do not hesitate to contact me with any questions or concerns.

| PHASE I:        | Generally 0 - 6 weeks post-op  |
|-----------------|--|
| PHASE I GOALS:  | Protect surgical graft<br>0-100° Knee ROM<br>Regain adequate quadriceps control  |
| PRECAUTIONS:    | *Wear brace at all times (even while sleeping)*  |
| CRUTCHES:       | Touch down weight-bearing (Foot flat: 0 - 25% body weight)   |
| BRACE:          | Locked at 0° x 1 week & then gradually open in 20° increments as quad control obtained<br>May DC brace once patient can perform straight leg raise w/out extension lag   |
| WOUND:          | Post-op dressing remains intact until post-op day #5<br>May begin showering after post-op day #5 (keep incision site clean)<br>* <b>Do <u>NOT</u></b> submerge knee in tub or pool for 2 weeks*<br>Bilateral compression stockings for 7-10 days: unilateral use thereafter as needed<br>Suture/staple removal @ 10-14 days per Ortho/PT |
| REHABILITATION: | Frequent use of cryocuff and/or ice with lower extremity elevated<br>Begin patellar mobilizations (10 reps each direction TID) after suture/staple removal<br>Begin scar massage after incision site sloughs/scar is formed<br>Quad/Hamstring/Adductor/Gluteal sets – Straight leg raises/Ankle pumps                                    |
| FOLLOW-UP:      | Physical Therapy: Weekly; Ortho: ~2 & 6 weeks post-op;<br>Supervised rehabilitation: 2-3 x per week as needed  |
| DOCUMENTATION:  | Precautions, pain level, medications, modalities<br>Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Effusion?<br>Neurovascular status: Distal pulses, motor and sensation intact? Presence of calf pain?<br>Knee ROM & quadriceps function   |

| PHASE II:       | Generally 7-12 weeks post-op  |
|-----------------|---|
| PHASE II GOALS: | Normal gait and stair ambulation<br>Full Knee ROM   |
| PRECAUTIONS:    | * <u>NO</u> impact activities *<br>* <u>Avoid</u> loading the knee in deep flexion*   |
| CRUTCHES:       | Progress gradually to full weight-bearing during post-op weeks 7-10   |
| BRACE:          | Not necessary if good quad control  |
| REHABILITATION: | Advance to full passive ROM (at least 130 degrees)<br>Continue quad/hamstring/core strengthening<br>Begin stationary bike for ROM<br>Gait drills to normalize gait.<br>May begin closed chain exercises once fully WB (avoid deep knee flexion)<br>Wall sits/mini-squats/toe raises |
| FOLLOW-UP:      | Ortho: ~12 weeks post-op;<br>Supervised rehabilitation: 2-3 x per week as needed  |
| DOCUMENTATION:  | Precautions, pain level, medications, modalities<br>Effusion<br>Knee ROM & quadriceps function<br>Gait  |

| PHASE III:       | Generally 3-12 months post-op   |
|------------------|---|
| PHASE III GOALS: | 80-90% quadriceps and HS strength return<br>No pain or effusion with sport or work specific movements including impact  |
| PRECAUTIONS:     | * <u>NO</u> participation in sports or military schools until cleared (high impact sports usually<br>takes 10-12 months)*<br>Post activity soreness should resolve within 24 hours<br>Avoid post-activity swelling  |
| BRACE:           | Not needed  |
| REHABILITATION:  | Continue phase II exercises as needed<br>Add functional leg strengthening – squats, lunges, single leg press<br>Single leg balance and proprioception exercises<br>May start light jogging 5-9 months pending good quad strength, normalized walking gait,<br>& no swelling with non-impact exercises<br>Gradually progress to sport/work specific balance & proprioceptive impact drills |
| FOLLOW-UP:       | Ortho: ~6, 9, & 12 months post-op;<br>Supervised rehabilitation: 1-2 x per week as needed   |
| DOCUMENTATION:   | Pain level & medications<br>Effusion<br>Knee ROM & quadriceps function<br>Hop for distance at 6 months post-op<br>Biodex testing at 6 months post-op  |
| MISCELLANEOUS:   | <ul> <li>After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity &amp; duration as tolerated.</li> <li>The recommendation is to wait until 9-12 months post-op to return to contact/collision sports. This time period may be adjusted slightly by the surgeon and therapist according to patient progress.</li> </ul>                               |