

## REHABILITATION GUIDELINES FOR KNEE: OATS TRANSPLANT OF FEMORAL CONDYLE (ALLOGRAFT)

### PHASE I (0-6 WEEKS POST-OP)

### DATES:

Appointments	<ul style="list-style-type: none"> <li>Follow-up visit with MD 7-10 days after surgery</li> <li>Start physical therapy within first 7 days after surgery 2x week</li> </ul>
Rehabilitation Goals	<ul style="list-style-type: none"> <li>Protect surgical graft site in knee</li> <li>Decrease inflammation</li> <li>Gain full knee ROM and patellar mobility</li> <li>Regain quadriceps control</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>TTWB x 6 weeks</li> <li>If knee brace ordered ambulate locked at 0 degrees x 6 weeks</li> <li>Gain full knee extension immediately</li> <li>Gain Knee Flexion gradually: 0-90 degrees 1-2 weeks, 0-110 degrees 3-4 weeks, 0-130 5-6 weeks</li> <li>Avoid Open Chain ex's x 6 weeks</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>Quadriceps, Glut, and Hamstring sets</li> <li>4-way straight leg raises</li> <li>Prone knee extension hangs</li> <li>Wall slides and heel slides for PROM knee flexion</li> <li>Pool at 3-4 weeks s/p if incisions fully closed and cleared for PWB by MD</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>Bike with no resistance starting week 3-4</li> <li>Upper body ergometer</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>Full knee extension</li> <li>Able to do straight leg raise with good quad control</li> </ul>

**PHASE II (6-12 WEEKS POST-OP)**
**DATES:**

Appointments	<ul style="list-style-type: none"> <li>Follow-up visit with MD at 6 weeks</li> <li>Continue with physical therapy 2x week</li> </ul>
Rehabilitation Goals	<ul style="list-style-type: none"> <li>Gradual progression of weight bearing to full</li> <li>Normalize gait</li> <li>Full knee AROM</li> <li>Progression of quad and hip strength now in closed kinetic chain</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>Progress weight bearing 25% per week till full weight bearing</li> <li>Gait with crutches weaning off by 8-10 weeks</li> <li>Avoid loading knee in deep flexion to protect implant site</li> <li>No impact activities until 12 weeks post op</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>Pool walking to normalize gait</li> <li>Closed kinetic chain hip strength (bridges, step-up/downs)</li> <li>Double leg balance and proprioception drills progressing to single leg</li> <li>Partial Squats and Lunges to 60 degrees or less of knee flexion</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>Stationary bike</li> <li>Pool progressing to land treadmill for gait</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>Normal gait pattern</li> <li>Full knee ROM</li> <li>Functional movement on affected leg with steps, gait, and weight shift</li> <li>Able to hold single leg stance for 15 seconds</li> </ul>

**PHASE III (12 TO 18 WEEKS POST-OP)**
**DATES:**

Appointments	<ul style="list-style-type: none"> <li>Continue with physical therapy 1-2x week</li> </ul>
Rehabilitation Goals	<ul style="list-style-type: none"> <li>Quality movement with control and no pain with functional activities</li> <li>Increase muscular strength to within 90% of contralateral leg</li> <li>Gradual return to recreational activities</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>Avoid post-activity swelling and pain</li> <li>Pain free strengthening program</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>CKC exercises such as deep squats, lunges, single leg press</li> <li>Single leg balance exercises such as step-up/downs, single leg squat, y-balance test</li> <li>Hip and core strength continue</li> <li>Slow return to impact loading near end of phase such as double leg jump</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>Stationary Bike</li> <li>Treadmill walking, slow progression to run/walk program</li> <li>Swimming</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>Return to sport cleared before fully returning to high impact sports</li> <li>Dynamic neuromuscular control in multiple planes</li> </ul>

References: Baer, Geoffery MD, Sherry, Marc PT at University of Wisconsin rehabilitation guidelines

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