

REHABILITATION GUIDELINES FOR FEMORAL OSTEOTOMY, ACL RECONSTRUCTION WITH PERONEUS LONGUS ALLOGRAFT, OPEN ALLOGRAFT OATS, LATERAL MENISCUS ALLOGRAFT TRANSPLANTATION, MICROFRACTURE

PHASE I (0-6 WEEKS POST OP)

DATES:

Appointments	<ul style="list-style-type: none"> • MD follow up at 2 weeks for wound check, X-ray, stitch removal • MD follow up at 6 weeks for X-ray and progress assessment • Begin physical therapy 2-3 x/week within 2-4 days of hospital discharge
Rehabilitation Goals	<ul style="list-style-type: none"> • Full extension symmetrical to contralateral knee before the first post-op visit at 2 weeks • PROM 0-90° • 20° SLR without quad lag • Maintain WB precautions • Edema control • Monitor for s/s of DVT/infection
Precautions	<p>x 6 weeks for all:</p> <p>WB:</p> <ul style="list-style-type: none"> • NWB with crutches <p>Brace:</p> <ul style="list-style-type: none"> • locked 0° for ambulation, brace open 0-90° at rest in sitting • sleep with brace locked at 0, unlock 0-90 when becomes intolerable <p>ROM:</p> <ul style="list-style-type: none"> • AROM/PROM 0-90 degrees • Avoid putting a pillow under the knee
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Prolonged extension: prone hang, supine with roll under ankle • Heel slide, wall slide to 90 degrees • Isometric quad set, then SLR • Hamstring isometrics • 4-way hip and ankle exercises • Patellar mobilizations
Cardiovascular Exercises	<ul style="list-style-type: none"> • Seated arm bike

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Progression Criteria	<ul style="list-style-type: none"> • ROM 0-90 degrees, full ankle ROM • MD clears patient to discharge brace and begin next phase via X-ray • Good quad set • Able to straight leg raise without lag
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PHASE II (6-12 WEEKS POST OP)

DATES:

Appointments	<ul style="list-style-type: none"> • Continue physical therapy 2 x week, progress to 1 x week when PT deems appropriate • MD appointment for X-ray and progress assessment at 6 and 12 weeks
Rehabilitation Goals	<ul style="list-style-type: none"> • Increase weight bearing progression per MD specifications • DC crutches after 10 weeks when quad control returns, full extension achieved, stable with low fall risk • Full knee and ankle ROM • Increase functional weight bearing strength as able • Core integration
Precautions	<ul style="list-style-type: none"> • WB progression: <ul style="list-style-type: none"> - at 6 weeks to 25%, go up 25% per week until full WB at 10 weeks (get cleared by MD and X-ray prior to starting progression)
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • If cleared for full WB: • HEP 5x/week • Begin closed kinetic chain exercises with knee flexion: <ul style="list-style-type: none"> - Mini squat, lunges, bridges, sport cord, wall squats, step up/down • Progress neuromuscular proprioceptive/balance exercises including single leg balance progression- varying surfaces • Pool available: begin 4 way hip, lateral movement, deep water jogging in place (no freestyle or frog/breaststroke kick)
Cardiovascular Exercises	<ul style="list-style-type: none"> • Stationary bike • Arm bike
Progression Criteria	<ul style="list-style-type: none"> • Neuromuscular exercises without difficulty • No dynamic valgus with exercises

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PHASE III (3-5 MONTHS POST OP)

DATES:

Appointments	Continue physical therapy 1-2 x/week
Rehabilitation Goals	<ul style="list-style-type: none"> • Running patterns at 75% speed • Good jumping mechanics- NO DYNAMIC VALGUS • Hop drills without difficulty
Precautions	<ul style="list-style-type: none"> • No downhill walking/running, downhill skiing, downhill biking until 4.5 months
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • HEP 5x per week • Agility drills: <ul style="list-style-type: none"> - Shuffling - Hopping - Running patterns (Ex: figure 8) • Sport specific closed-chain exercises: <ul style="list-style-type: none"> - leg press (0-60°) - step ups - mini squats (0-60°) - short arc quad (30-90°) - hamstring curls • light weight/high repetitions
Cardiovascular Exercises	<ul style="list-style-type: none"> • Begin endurance closed-chain exercises 3-4x/week <ul style="list-style-type: none"> - Stairmaster, stationary bike, elliptical, NordicTrack (short stride) - Focus on increasing endurance. • Gait training • Jogging on treadmill or even ground at 12 weeks, progress to running patterns at 75% • Pool available: may start freestyle swimming (avoid frog/breaststroke kick), progress to shallow water jogging
Progression Criteria	<ul style="list-style-type: none"> • Running without knee pain or effusion • Hopping/agility drills without knee pain or effusion

PHASE IV (: 5-8 MONTHS POST OP)

DATES

Appointments	Continue physical therapy 2 visits per month to review HEP
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Rehabilitation Goals (Phase IV continued)	<ul style="list-style-type: none"> • Slow progression from jogging on even ground or treadmill to running patterns, hill work, cutting, jumping, pivoting • May begin plyometric program: jump rope exercises
Precautions	<ul style="list-style-type: none"> • Earliest return to sport = 9 months • Must pass return to sport test
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • HEP 4-5x per week • Return to sport testing at 9 months post-op, prior to MD visit • Agility drills: shuffling, hopping, running patterns (Ex: figure 8) • Sport Specific: plyometric program, fast straight running, backward running, cutting, cross-overs, carioca, etc. in controlled environment
Cardiovascular Exercises	<ul style="list-style-type: none"> • Pool available: may advance swimming (avoid frog/breaststroke kick)
Progression Criteria	<ul style="list-style-type: none"> • Quadriceps and hamstring strength at least 90% of opposite leg • Single leg hop test and vertical jump at least 90% of opposite leg • Jog, full speed run, shuttle run, and figure of 8 running without a limp • Full controlled acceleration and deceleration • Squat and rise from a full squat • No effusion or quadriceps atrophy

References:

PT name and date: Ariel Duvall 1/24/17

MD name and date: January 2017

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