

STANDARD MENISCAL REPAIR GUIDELINES



Precautions

- Weight bearing as tolerated
- No weight bearing flexion beyond 90° for six weeks
- No resistive hamstring exercises for 8 weeks
- Isotonic strengthening
 - 40-90° open-chained to avoid patellofemoral irritation
 - < 90° closed-chained to avoid patellofemoral irritation
- All progression based on soft tissue healing

Weeks 1 - 4

ROM	<ul style="list-style-type: none"> • Begin ROM progression from active-assisted to active (no force flexion beyond 90°) • Patellar mobilization • Edema control • Exercise bike: Half revolutions
Strengthening	<ul style="list-style-type: none"> • Neuromuscular re-ed with stim and/or biofeedback (if warranted) • Initiate NWB strengthening if weight restrictions in place <ul style="list-style-type: none"> ○ Modify ROM (See above) ○ Quad Set ○ SLR • Initiate both WB and NWB strengthening if weight bearing as tolerated <ul style="list-style-type: none"> ○ Modify ROM (See above) ○ Quad Set, TKE, etc ○ SLR ○ Balance exercise • Partial WB Shuttle/Leg Press
Goals to Progress	<ul style="list-style-type: none"> • Good quad set • ROM 0-90° • Little to no extension lag with SLR • Minimal to no edema

Weeks 4-6

- Discontinue crutches appropriately per normalization of gait
- Advance exercise if already weight-bearing per soft tissue healing

ROM	<ul style="list-style-type: none"> • Continue as before (no forced flexion beyond 90°) • Full exercise bike revolutions for ROM and endurance
Strengthening	<ul style="list-style-type: none"> • Progress to full weightbearing by week 6 • Begin seated BAPS and heel/toe raises • Partial to FWB shuttle/Total Gym/aquatics strengthening <ul style="list-style-type: none"> ◦ Bilateral LE progression to single LE strengthening • Trunk and lumbosacral strengthening
Goals to Progress	<ul style="list-style-type: none"> • No antalgic gait without use of assistive device • Good quad set • Able to stand on single-leg • No exacerbation with PWB strengthening

Weeks 6-8

ROM	<ul style="list-style-type: none"> • Continue with emphasis on terminal extension and pain-free flexion • Exercise bike for endurance
Strengthening	<ul style="list-style-type: none"> • Begin FWB strengthening < 90° and progress as tolerated • Progress NWB and WB strengthening/stability/balance/proprioception exercises <ul style="list-style-type: none"> ◦ Lunges, steamboats, side-stepping, leg press, modified leg extensions • Progress shuttle/Total Gym/Aquatics strengthening • Continue to progress lumbosacral strengthening
Goals to Progress	<ul style="list-style-type: none"> • Increased strength/stability/proprioception with therapeutic exercise and without exacerbation of symptoms • No reactive instability or effusion with WB activity

Weeks 8-10

ROM	<ul style="list-style-type: none"> • Continue with exercise bike and stretching
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Strengthening	<ul style="list-style-type: none"> ● Begin PWB shuttle plyometrics <ul style="list-style-type: none"> ○ Shuttle jogging ○ Progress from bilateral to single LE ○ Progress from straight plane to rotational movements ● Initiate isolated hamstring strengthening per tolerance ● Progress LE and trunk strength and stability exercises ● Hop downs ● Emphasis on appropriate mechanics
Goals to Progress	<ul style="list-style-type: none"> ● Increased strength/stability/proprioception with therapeutic exercise without exacerbation of symptoms ● No reactive instability or effusion with WB activity

Weeks 10-12

Strengthening	<ul style="list-style-type: none"> ● Continue and progress WB and NWB strengthening ● Full weight bearing plyometrics <ul style="list-style-type: none"> ○ Bilateral ○ Shuttle ○ Rotational and single leg jumping ● Initiate walk-jog progression <ul style="list-style-type: none"> ○ Criteria to initiate jogging <ul style="list-style-type: none"> ■ Complete single leg hop-downs without medial/lateral knee displacement ■ Normalized ROM ■ Audible rhythmic strike patterns and no gross visual antalgia
Goals to Progress	<ul style="list-style-type: none"> ● Complete plyometric and jogging activity without pain and/or dynamic instability ● No reactive effusion ● ROM 0-135°

Weeks 12-16

Strengthening	<ul style="list-style-type: none"> ● Full weight bearing plyometrics <ul style="list-style-type: none"> ○ Progress from straight-plane to diagonal/rotation exercise ● Continue jogging progression ● Strength progression stable to unstable surface <ul style="list-style-type: none"> ○ Emphasis on quad, hamstring and trunk dynamic stability ● Shuttle/aquatics/Total Gym, etc. <ul style="list-style-type: none"> ○ Progress rotational and single leg jumping ● Begin agility exercises between 50-75% (utilize visual feedback to improve mechanics) <ul style="list-style-type: none"> ○ Side shuffling ○ Hopping ○ Carioca ○ Figure 8 ○ Zig-Zag ○ Resisted jogging (Sports Cord) in straight planes
Goals to Progress	<ul style="list-style-type: none"> ● Functional Test <ul style="list-style-type: none"> ○ 3 cross-over hop test for distance (within 15% of uninvolved limb)

	<ul style="list-style-type: none"> ○ Quad to Hamstring isokinetic strength ratio \geq 60% ● Complete sport specific drills without exacerbation of symptoms or reactive instability
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Month 4-6: Sports Specific Training

Strengthening	<ul style="list-style-type: none"> ● Emphasis on quad, hamstring and trunk dynamic stability ● Continue sport-specific agility exercises (utilize visual feedback to improve mechanics) <ul style="list-style-type: none"> ○ Progress gradually to 100% per tolerance ○ Emphasis on power and change of direction ○ Utilize both indoor and outdoor surfaces
Goals to Return to Sport	<ul style="list-style-type: none"> ● Physician clearance at 6 month check up ● Symmetry with functional testing (3 single-leg cross-over, etc) ● No reactive effusion or instability with sport-specific activity

References

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