# Meniscal Repair Rehabilitation

# Phase 1: Maximum Protection Phase (Weeks 1-4)

**Goals:** Control inflammation/effusion Allow early healing

Full passive knee extension Gradually increase knee flexion Independent quad. Control

Stage 1: Immediate post-surgery days 1-7

* Ice, compression, elevation
* Brace locked at 0 degrees for ambulation and sleeping only
	+ Brace may be unlocked during sitting etc.
* ROM (Passive 0-90)
* Patellar mobilization
* Strengthening exercise:
	+ Quad Sets
	+ SLR flexion
	+ Hip Abd/Adduction
	+ Knee Extension 60-0 degrees
* Weight Bearing: Non weight bearing for 4-6 weeks post-op
* Avoid active knee flexion

Stage 2: Weeks 2-4

* Continue use of ice and compression
* Brace locked for ambulation
* ROM Guidelines
	+ Gradually increase PROM
	+ Week 2: 0-90 degrees
	+ Week 3: 0-105 degrees
	+ Week 4: 0-120 degrees
	+ Weight bearing guidelines-> Non weight bearing for 4-6 weeks post-op Week 2: 50% WB
* Strengthening Exercises:
	+ SLR (all 4 planes)
	+ Knee Extension 90-0degrees
	+ Heel Slides

\*Avoid twisting, deep squatting, stooping

\*Avoid hamstring curls

# Phase 2: Moderate Protection Phase (5-8 weeks) Goals: Full PROM

No Swelling/inflammation Re-establish muscle control Proper gait pattern

WBAT 4-6 weeks post-op

* Continue use of ice and compression
* Continue ROM and progress to 0-135 Degrees
* Progress strengthening exercises Phase I
	+ Heel slides
	+ Knee extension 90-0 Degrees
	+ Standing hamstring curls
	+ Mini- squats 0-45 degrees
* Begin Level Two agility
	+ Cup walking
	+ Planks
	+ Bridging
	+ Steamboats 4 way (involved leg down)
	+ Ball roll: for, side and back (involved leg down)
	+ Heel raises
* Light strengthening Phase II: Short range leg press, 4-Way hip, leg extension 90-45, Dead lifts
* Bicycle (as ROM permits)
* Pool Program
* Discontinue Brace at 4-6 Weeks

\*Avoid twisting, pivoting, running and deep squatting

# Phase 3: Controlled Activity Phase (9-16)

**Goals:** Improve strength and endurance Maintain Full ROM

Gradually increase applied stress

Week 9 to Week 11

* Continue all strengthening exercises listed above
* Initiate Dynamic warm-up
* Initiate Form Stepping (progress from walk pace to fast step pace)
* Initiate light resistive hamstring curls
* Initiate elliptical
* Toe calf raises
* Progress balance training
* Progress to isotonic strengthening program

Week 12 –15

* Continue Strengthening and stretching program
* Continue dynamic warm-up
* Form running: progress from fast pace walk to trot to jog pace
* Initiate treadmill for endurance (3.5mph fast walk then progress to light jog at 14 weeks)
* Begin step ups and step downs
* Initiate pool running

**Phase 4: Return to Activity Phase (4-6 month) Goals:** Improve strength and endurance

Prepare for unrestricted activities

Criteria to Progress to Phase 4

* Full non-painful ROM
* No pain or tenderness
* Satisfactory clinical exam

Exercises

* Continue and progress all strengthening exercises and stretching drills
* Deep squatting permitted at 4 months
* Initiate jumping program Ankle jumps, two-legged hop, two –legged jumps, single leg, etc…
* Initiate straight line running at 4 months
* Initiate pivoting and cutting: 5 months
* Initiate agility training: 5 months
* Initiate jumping program at 6 months: Ankle jumps, two-legged hop, two –legged jumps, single leg, etc…
* Gradually return to sport drills at : 6 months
* Non contact practice 7 months
* Full competition non contact sports 8 months
* Full competition full contact 9 to 12 months