



MENISCUS REPAIR

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These guidelines are a **framework** for the post-operative rehabilitation program. They **do not** substitute for any specific restrictions or requirements determined through the necessary shared decision-making and collaboration between the operating surgeon and the treating rehabilitation team. **Weight bearing is allowed to progress as tolerated to full weight bearing with the knee in full extension.**

PHASE 1

WEEKS 0–6

Protect the repair

PHASE 2

WEEKS 7–12

Gait & full ROM

PHASE 3

MONTHS 3–6

Return to run

BRACE

6–12 WEEKS

Locked at 0° for gait

CLEARANCE

6–9 MONTHS

Collision sport / full duty

1

PROTECT THE REPAIR · GENERALLY 0–6 WEEKS POST-OP

GOALS Protect the surgical repair · ROM 0–90° or as dictated by the type of repair · regain adequate quadriceps control with no extensor lag · minimize pain and swelling

PRECAUTIONS

- Wear brace **AT ALL TIMES**, even when sleeping
- NO FLEXING** the knee with load applied (squat or leg press)
- Note:** bending the knee and weight bearing are both allowed, but **not at the same time**

BRACE

- Wear the brace locked in extension during ambulation

WEIGHT BEARING

- Weight bearing is allowed to **progress as tolerated to full weight bearing** with the knee in **full extension**
- Progress while wearing the brace locked at 0°

RADIAL, COMPLEX & ROOT REPAIRS

WEIGHT BEARING

- Weight bearing is allowed to **progress as tolerated to full weight bearing** with the knee in **full extension**
- Note:** may need to be modified based on the surgical report

BUCKET-HANDLE, VERTICAL & LONGITUDINAL

WEIGHT BEARING

- Weight bearing is allowed to **progress as tolerated to full weight bearing** with the knee in **full extension**
- Note:** may need to be modified based on the surgical report

WOUND

- Post-op dressing remains intact until post-op day 3 (~72 hours after surgery)
- Shower after post-op day 3 (no need to cover the incision site)
- DO NOT SUBMERGE** the knee in water until incisions are fully healed
- Suture removal at 10–14 days post-op per orthopaedics

CRYOTHERAPY

- Cold with compression / elevation (ice with compression wrap)

REHABILITATION

- Begin scar massage after the incision has healed and the scar is formed
- Begin patellar mobilizations after suture / staple removal

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MENISCUS REPAIR · PHASES 1–2 · PAGE 2 OF 4

WEEKS 1–2

QUAD CONTROL

- ◆ Calf pumps with theraband
- ◆ Assisted heel slides within the limits of 0–90°
- ◆ Quad sets — use e-stim until the patient can do 10 SLRs without extension lag
- ◆ Supine passive extension with a towel under the heel
- ◆ Gentle HS and calf stretching
- ◆ Hip / glute muscle endurance exercises

WEEKS 3–4

PROGRESS

- ◆ Continue progressing the exercises from weeks 1–2 as appropriate
- ◆ Short arc quads; add light weights as tolerated
- ◆ Seated ankle ROM and proprioceptive training
- ◆ Gait training progression as needed
- ◆ UBE

WEEKS 5–6

ADD LOAD

- ◆ Leg press 0–60° (**note:** when ROM >85°)
- ◆ Hip extension endurance exercises
- ◆ Stationary bike 0–100° knee ROM
- ◆ Beginner-level pool exercises when incisions are fully healed; primarily in the sagittal plane (no breaststroke or whip kick motion) — gait training and deep-water jogging only

FOLLOW-UP

- ◆ Supervised rehab: 2–3× per week
- ◆ PT re-eval: every 1–2 weeks
- ◆ Ortho re-eval: ~7–10 days and 6 weeks

2

GAIT & FULL MOTION · GENERALLY 7–12 WEEKS POST-OP

GOALS Normal gait and stair ambulation · full knee ROM

PRECAUTIONS

- ◆ **NO RUNNING**

WEIGHT BEARING

- ◆ Weight bearing is allowed to **progress as tolerated to full weight bearing** with the knee in **full extension**

BRACE

- ◆ Discontinue the brace if there is adequate quadriceps strength and ROM

REHABILITATION

- ◆ Continue Phase 1 exercises as needed
- ◆ Progress to the following exercises and increase intensity gradually when the patient is ready (no increase in knee pain or effusion since the previous session)
- ◆ **Note:** all resisted exercises should start with low weights, high reps, and in a ROM with minimal pain

WEEKS 7–8

GAIT TRAINING

- ◆ Stationary bike for conditioning — begin with 5–10 minutes and progress gradually
- ◆ Gait training: cone walking, marching, retro-walking, exercise band
- ◆ General LE stretching: calf, HS, quads, hip flexors, hip adductors
- ◆ Begin light elliptical / stairmaster when gait is normalized
- ◆ Progressive LE strengthening (calf press, leg press, squats 0–60°, HS curls). **Emphasis on knee extension strength.**

WEEKS 9–10

NEUROMUSCULAR

- ◆ Progressive neuromuscular training
 - Body blade, plyoball, rebounder, platform training
 - Progress in duration and intensity
 - DL to SL
- ◆ Progressive strengthening with light resistance
 - Calf press, leg press, squats (progress in depth), hip abduction / adduction, HS curls

WEEKS 11–12

CONDITIONING

- ◆ Gradual progression of stationary bike, elliptical and/or stairmaster for conditioning
- ◆ Progressive pool program as tolerated

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MENISCUS REPAIR · PHASES 2–3 · PAGE 3 OF 4

FOLLOW-UP

- ◆ Supervised rehab: 2–3× per week
- ◆ PT re-eval: monthly
- ◆ Ortho re-eval: ~12 weeks post-op

3

RETURN TO RUN · GENERALLY 3–6 MONTHS POST-OP

GOALS Jog at own pace and distance without pain · ≥90% isokinetic quadriceps and HS strength compared with the uninvolved limb · ≥90% SL hop for distance and crossover hop test · meet occupational requirements at 4–6 months

PRECAUTIONS

- ◆ **NO PARTICIPATION** in contact sports or physically demanding military schools until cleared by orthopaedics

BRACE

- ◆ None

REHABILITATION

- ◆ Continue Phase 2 exercises as needed
- ◆ Progress to the following exercises and increase intensity gradually when the patient is ready (no increase in knee pain or effusion since the previous session)

WEEKS 13–16

STRENGTH & AGILITY

- ◆ Non-impact aerobic conditioning
- ◆ General LE stretching
- ◆ Progressive strengthening: lunges, leg press, calf press, squats <90°, HS curls, hip extension / abduction / adduction
- ◆ Isokinetic training if available
- ◆ Progressive balance training as needed
- ◆ Progressive agility and plyometric training

WEEKS 17–26

RETURN TO RUN

- ◆ Progressive jogging program beginning **no earlier than 16 weeks**
 - Increase time and/or distance no more than 10–20% per week

FOLLOW-UP

- ◆ Supervised rehab: 1–2× per week
- ◆ PT re-eval: monthly
- ◆ Ortho re-eval: ~6 months post-op

DISCHARGE GOALS

- ◆ Hop test and Y-balance limb symmetry >90%
- ◆ Isokinetic testing limb symmetry >85%
- ◆ Mitigate future injury risk

BEYOND 6 MONTHS

MISCELLANEOUS

- ◆ After 6 months post-op, Phase 3 exercises are continued and gradually increased in intensity and duration as tolerated
- ◆ Pass service fitness test at 6–8 months
- ◆ Progress activities for return to sport, collision sports or aggressive military training (e.g. airborne school) based on the patient's functional performance and endurance — directed by the orthopaedic surgeon and physical therapist; **may require 6–9 months before clearance without restrictions**

REFERENCES

1. Cavanaugh JT, Killian SE. Rehabilitation following meniscal repair. *Curr Rev Musculoskelet Med*. 2012; 5: 46–58.
2. Kozlowski EJ, et al. Meniscus repair: the role of accelerated rehabilitation in return to sport. *Sports Med Arthrosc Rev*. 2012; 20: 121–126.
3. Logerstedt DS, et al. Knee pain and mobility impairments: meniscal and articular cartilage lesions. *J Orthop Sports Phys Ther*. 2010; 40(6): 1–35.

Adapted from the Meniscus Repair Rehabilitation guideline in the *Tri-Service Post-Operative Rehabilitation Guidelines*, Defense Health Agency, May 2020. Weight-bearing progression has been modified per surgeon direction.

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MENISCUS REPAIR · CONTACT & LOCATIONS · PAGE 4 OF 4

QUESTIONS ABOUT YOUR RECOVERY?

Call the office with any question about your protocol, your brace or sling, or your incision. Bring this handout with you to every post-operative visit.

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CLINIC LOCATIONS

Belle Meade Orthopaedics and Sports Medicine
6002 Highway 100, Nashville, TN 37205

Vanderbilt Orthopaedics Nashville West
6606 Charlotte Pike, Suite 104, Nashville, TN 37209

Vanderbilt Orthopaedics Franklin
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APPOINTMENTS & QUESTIONS

Vanderbilt Orthopaedics
615-936-7846

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ONLINE

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