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ACL RECONSTRUCTION w/ Meniscal Repair (Inside-Out/Bucket-Handle)

PHASE I:

TIME FRAME: Immediately post-op through 6 weeks.

PT visits 1-2x/ week Patient to do H.E.P. daily

GOALS: Full passive extension (Passive extension to 0°, but no recurvatum for hamstring grafts)

ROM 0 - 90° Reduce swelling

90° flexion by 5d post-op Maintain patella glide

Achieve good quad set at 0° and 90°

Protect graft fixation from early cyclic loading.

PRECAUTIONS: Brace removal prn by therapist for exercises

Brace locked at 0° for sleeping until 0° extension maintained

Brace locked at 0° for ambulation Weight-bearing – TTWB w/ crutches

Limit knee flexion 0-90°

- 1. 0° quad sets (consider NMES or biofeedback for protocol control).
- 2. Assisted flexion (dangle) with uninvolved leg crossed under ankle.
- 3. 90°quadriceps isometrics once 90° flexion achieved.
- 4. Theraband™ leg press 100° to 30° as tolerated
- 5. Calf, hamstring stretching, calf pumps.
- 6. Heel slides.
- 7. Stationary bike for promotion of range of motion.



ACL RECONSTRUCTION w/ Meniscal Repair (Inside-Out/Bucket-Handle)

PHASE II:

TIME FRAME: 6 to 8 weeks post-op.

PT visits - TIW

Patient to do H.E.P. daily

GOALS: Advance to WBAT by 8 weeks

ROM 0-125°

Open brace for ambulation with crutches

D/C brace/ crutches when adequate quad and non-antalgic gait

Restore full passive hyperextension Restore patella mobility to normal Achieve good quad set at 0° and 90° Increase quad and HS strength.

PRECAUTIONS: Avoid terminal open chain quad PRE

- 1. Patella and scar tissue mobilization by therapist and patient.
- 2. Straight leg raises continue in brace until strength is sufficient to <u>prevent extension lag</u>. Add weight as tolerated *only* if full extension maintained.
- 3. Isometric quad sets at 90° knee flexion (use a belt looped around leg of chair).
- 4. Theraband™ leg press from 100° to 0°.
- 5. Prone hangs to full extension.
- 6. Calf strengthening (Heel raises standing, sitting, and Theraband™).
- 7. Closed kinetic chain quadriceps strengthening (mini squats, weight shifting, leg press).
- 8. Single leg balance, proprioception work.
- 9. Stationary bike progress light resistance as tolerated.



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PHASE III:

TIME FRAME: 8 weeks to 12 weeks post-op.

PT visits - BIW

Patient should do workout in health club or home gym TIW

GOALS: WBAT

Regain full motion to flexion. Restore patella mobility to normal. Begin improving proprioception. Normal community ambulation.

Increasing strength with program in therapy and / or club.

PRECAUTIONS: Avoid terminal open chain quad PRE.

No jumping or cutting activities.

- 1. Continue Range of motion / flexibility to equal opposite side.
- 2. Prone hangs or other passive extension exercise until full extension achieved.
- 3. Continue closed kinetic chain quad strengthening and progress to single leg mini squats (pt may use weighted back pack), single/ double leg press, wall sits to 90°, stepups, lateral step-up, and weighted terminal knee extension.
- 4. Continue to progress hamstring, calf, and hip strengthening (side steps, resisted walking, raises, curls).
- 5. Stationary bike increase time and resistance levels. Progress to interval program.
- 6. Elliptical, NordicTrack, Stairmaster, treadmill machines and walking for conditioning with attention paid to patella symptoms.
- 7. Pool programs walking initially with progression to deep-water agua jogging.
- 8. Continue to progress proprioception and balance activities (ball toss, balance boards, foam, and mini trampoline).
- 9. Open chain knee extension from 100° to 45°
- 10. Isometric quad sets at 90° knee flexion sitting and supine (ie. Hip flexed and neutral).



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PHASE IV:

TIME FRAME: 12 weeks to 20 weeks post-op.

PT visits – every other week

Patient should do workout in health club or home gym 5x/week

GOALS: Full ROM

Normal patella mobility.

WBAT

Avoid painful activities

Gain sufficient strength, proprioception to initiate straight jogging.

If swelling limits flexion – pt to take 2 Aleve PO BID.

PRECAUTIONS: No sudden starts/stops or quick change in direction.

No jumping or cutting activities

- 1. Continue strength building program by increasing weights and decreasing repetitions per set, 3-4 times per week.
- 2. Progress toward full weight-bearing jog at 12 weeks. Begin on treadmill and advance to track (initially walking curves). Slowly increase the pace and distance.
- 3. Advanced proprioception activities.
- 4. Isokinetic strengthening full range of motion if available.
- 5. Open chain knee extension 30° to 0°.



PHASE V:

TIME FRAME: Quadriceps/hamstring strength 80% of uninvolved thigh required for phase V.

ACL RECONSTRUCTION w/ Meniscal Repair (Inside-Out/Bucket-Handle)

20 weeks to 24 weeks post-op. PT visits – every other week

Patient should do workout in health club or home gym 5x/week.

GOALS: Restore advanced proprioception

Restore normal muscle strength and endurance

Safely restore functional sports performance in controlled setting.

Slow and controlled cutting activities under light load.

PRECAUTIONS: Quadriceps/hamstring strength 80% of uninvolved thigh required for phase V.

No fast or aggressive cutting

No hopping down from > 12" height

EXERCISES:

1. 4 week return to sports program/ agility program issued by therapist / physician.

- 2. Slow progression into plyometric training.
- 3. Cross overs
- 4. Figure 8 running.
- 5. Box / shuttle running
- 6. Accelerating / decelerating sprints
- 7. Progression into sport specific drills.

PHASE VI:

TIME FRAME: Quadriceps/hamstring strength 85% of uninvolved thigh required for phase VI.

Begin 6 months post-op.

Supervised but independent program

GOALS: Equal performance lower extremities on single and 3 hop test

Symmetric performance of basic and sport specific agility drills.

No sport until MD clearance

IF QUESTIONS: PLEASE CALL 469-800-7200