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## **STRENGTH CON'T**

Once patient is 4 weeks post op, increased weight bearing can begin. Start with 0-30 degree arc and increase based on patient tolerance.

- Leg press / Total Gym / Suspension Trainer - start with eccentrics.
- Anti-rotation exercises for trunk musculature
- Bridging / Hip hinge exercises

## **PROPRIOCEPTION**

Do not start before 4 weeks post op. Stable surface only.

## **CARDIO**

May begin stationary biking at 4 weeks post op  
Treadmill walking at 4 weeks post op

Criteria to progress to next stage:

Full ROM	No joint line pain
Minimal effusion	SLR with no extensor lag

## **WEEK 6-12**

Discontinue use of the brace

Goals: Restore normal gait                      Increase quad endurance  
No to trace effusion

## **ROM**

Maintain full ROM

## **STRENGTH**

Step up and step down exercises

Increase reps and sets to favor volume/hypertrophy. May increase load but muscle endurance is the goal at this time.

Retro ambulation program with resistance to work posterior chain

Squat / Push variations for lower extremity. Increase reps and sets with low resistance

Hip Hinge variations for lower extremity. Same progression as squat / push

Rotation (foot not planted) and anti-rotation for trunk muscles

## **PROPRIOCEPTION**

May begin balance work on unstable surface



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## **CARDIO**

Incline treadmill / Elliptical / Swimming (avoid flip turns)

Stationary biking – Outdoor cycling okay, avoid clip in pedals. Favor interval training over steady state

May begin pool jogging / Alter-G between 9-10 weeks based on strength. Water must be at chest level, Alter-G no more than 25% of body weight while running

Criteria for progression to next stage:

Symmetric SL step down from 6 inch height when compared to non-surgical leg

Full ROM

Minimal to no effusion

## **WEEK 12-16+**

### **ROM**

Maintain full ROM

Ankle, hip, thoracic spine and shoulder mobility exercises

### **STRENGTH**

May begin to increase load/resistance at this time. We prefer a linear progression of increased load over % of 1 RM or RPE. Increase the load of the lifts below by between 1 and 5 lbs per session. Must have 48 hours of rest between sessions if doing linear progression. Programming should not exceed 24 reps total (3x8, 4x6, etc.) for any 1 exercise per session due to load intensity.

Clinician may choose from any of the exercises below (variations based on individual patient are okay)

Ideally select 2 push movements for every 1 hip hinge movement

Squat/Push movement examples - Back, Front, Overhead, Box step up, Hex Bar, Total Gym, Leg press, etc.

Hip hinge examples - Single and double leg variations (Deadlift, RDL, Hip thrusters, GHD, Nordic hamstring, Good mornings, etc.)

Accessory lifts as needed

Continue linear progression of loading until patient plateaus. After patient plateaus, may change to a % 1RM program or RPE.

AVOID resisted OKC knee extension

### **PROPRIOCEPTION**



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Con't with unstable surface and progress to eyes closed. NO LIFTING / STRENGTH EXERCISES WHILE ON UNSTABLE SURFACE (Bosu, AirEx pad, etc.)

### **CARDIO**

Begin jogging / running program at 12 weeks if single leg step down test is symmetric

Cycling – May clip into pedals on road biking and XC mountain biking. Avoid enduro/downhill style riding

Hiking – May begin to wear a heavier, multi-day pack

Swimming – Flip turns okay at this time

Full return to sport between 4 and 6 months. Closer to 6 months for cutting and pivoting athletes.

### **SPORT SPECIFIC DRILLS**

Footwork drills at slow speeds – MUST AVOID PIVOTING

Throwing program can begin – Do not exceed 90 feet

Kicking program can begin – No cleats, ball must stay on the ground, volleys okay

Basketball shooting can begin – Spot shooting only, no defenders, minimal jump

Mini hurdle hops can begin. Progress based off dynamic control of knee.

Progress running program – cutting, begin with curves and progress speed and angle of cut based on strength and coordination. No hard / full speed cutting until 5-6 months post op

RPT Criteria for athletes

1. SL push strength 100% of uninvolved leg - Isokinetic testing okay
2. Blazepod testing – Lateral slide and 4 corners
3. 400 m run under 75 seconds (Power)
4. Reactive testing (shuttle test, 10 yard L, distance hop, crossover hop) pain free and confident
5. Psychologically ready to compete

Surgeon signature: \_\_\_\_\_

1-2 2-3 x per week for \_\_\_\_\_ weeks