

## Post-operative ACL – Autograft Rehabilitation Protocol

### Immediate Post-Operative Period (0-4 weeks)

- Primary goal is knee ROM, especially full, passive knee extension
  - There are no ROM restrictions unless otherwise advised by surgeon (ie. meniscal repair)
- Active open chain knee extension is **not** allowed
- Manual treatment may include:
  - Joint and soft tissue mobilization (avoid P/A glides) patella mobilization is initiated immediately to avoid infrapatellar contracture syndrome
  - PNF: **linear** hip patterns with knee flexion, ankle pivots, gentle hamstring and calf stretching
- Non-Manual treatment may include:
  - Hip PRE, quad sets in full knee extension, SLR as long as patient can maintain full knee extension, calf raises, contralateral progressing to bilateral stationary bike
  - Bilateral partial squats
- Patient is WBAT in knee immobilizer unless otherwise advised by surgeon (i.e., meniscal repair)
- If meniscal repair may be NWB/PWB and may or may not have ROM restrictions (depending on what part of meniscus was repaired, call office)
- Approximately 10 days to 2 weeks post-op, the patient may be placed in a functional brace (provided the patient demonstrates adequate motor control of the knee)
- Begin basic balance training in brace

### Weeks 4-6

- Continue manual therapy as needed for ROM
  - ROM: full extension and flexion >80% by week 5
  - PNF: may begin normal hip patterns with knee in full extension (if no extensor lag) with focus on proximal resistance, knee flexion in pattern, knee extension

hold-relax in 60 to 90 degrees with proximal tibial resistance. Add standing rhythmic stabilization and resisted gait if needed.

- Exercise program may add gym equipment (Leg press, Elliptical as tolerated, Stationary Bike, hip machines)
- Progress step downs (able to do 4" step with control by week 6)
- Progress balance training

## Weeks 6-8

- Continue manual therapy
  - Flexion should be >95% by week 7
  - PNF: may add 60-90 degree knee extension timing for emphasis if use
- proximal tibial resistance.
- Progress balance and coordination training
- Able to do 8" step with control
- May be out of brace for ADLs week 7-8 (depending on type of work) if MD approves
- Patient may swim freestyle with pull buoy as long as wounds are healed

## Month 3

- May swim easy freestyle without buoy, No fins
- May begin aqua jogging

## Months 4-5

- Progress jogging with MD approval and as long as patient has adequate strength (to prevent p-f symptoms)
- Able to do 8-inch step down with control several times
- Able to do "mini hops" with appropriate shock absorption

## Months 5-6

- Agility work with MD approval

## Months 6-9

- Back to sport in brace with MD approval and depending on functional strength, endurance, and adequate skill level

## Month 12

- May do sports without brace with MD approval

The above information is a guideline and may be modified at the discretion of the surgeon or therapist based upon patient's progress and surgical findings.

If patient has any other considerations (meniscal repair, microfracture treatment, etc) then the above information is superceded by the precautions set by surgeon.