ACL Reconstruction Rehabilitation Protocol

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**Diagnosis:** Right/Left ACL Reconstruction with BTB Autograft/Allograft, Hamstring or Quadriceps Autograft/Allograft

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**Date of Surgery:** ________________

Frequency 2-3 times per week.

- No open chain or isokinetic exercises
- Provide patient with home exercise program per protocol

**Weeks 0-2 (Phase I):**

- May use crutches immediately postop, but advance to WBAT with brace locked in extension as tolerated
- Straight leg raises 3-4 times/day with brace locked in extension, unlock brace for gentle ROM exercises.
- Patellar mobilization, 5-10 minutes daily

**Weeks 2-6 (Phase II): Period of protection**

- Weight bearing as tolerated without assist by post-op day 10.
- **BTB Autograft:** Brace unlocked for ambulation when quad control is adequate. Discontinue brace no sooner than 4 – 6 weeks post operative at the discretion of the therapist. Brace locked in extension at night until full terminal extension is attained.
- **BTB/Hamstring/Quadriceps Allograft:** Brace unlocked for ambulation when quad control is adequate. Discontinue brace no sooner than 2 – 4 weeks post operative at the discretion of the therapist. Brace locked in extension at night until full terminal extension is attained.
- **Hamstring/Quadriceps Autograft:** Brace unlocked for ambulation when quad control is adequate. Discontinue brace no sooner than 2 - 4 weeks post operative at the discretion of the therapist. Brace locked in extension at night until full terminal extension is attained.
- ROM – progress through passive, active and resisted ROM as tolerated. Extension board and prone hang with ankle weights (up to 10 lbs), posterior leg stretch (legs up against a wall), seated wall sits (back against wall, legs flat on ground) recommended. Stationary bike with no resistance for knee flexion (alter seat height as ROM increases). Encourage frequent ankle ROM.
- **ROM Goals** – Full extension by 2 wks, 110° of flexion by 2 wks, ≥130° flexion by 6 weeks.
- Patellar mobilization, 5-10 minutes daily.
- Modalities prn (ie electrical stimulation, ultrasound, etc) per discretion of therapist.
- Heat before therapy sessions.
- Ice after therapy sessions.
- May participate in aquatherapy after week three.
Weeks 6-12 (Phase III):

›› ROM – Continue with daily ROM exercises
›› **Goal – increase ROM as tolerated to full
›› Strengthening – Increase closed chain activities as tolerated. Progressive squat program.  
  *Monitor for anterior knee pain symptoms and adjust/slow down accordingly.* Add lunges,  
  side lunges, leg press and/or slideboard. Initiate Step Down program. Isotonic Knee  
  extension (90 to 40 degrees, closed chain preferred). Versaclimber/Nordic Track, retrograde  
  treadmill ambulation, Stairmaster. Add core strengthening exercises. Progress  
  balance/propiroception.
›› Continue stationary bike for ROM, strengthening and cardio.
›› Continue modalities prn as indicated above.
›› Heat before therapy sessions.
›› Ice after therapy sessions.

Weeks 12-18 (Phase IV):

›› Advance strengthening as tolerated, continue closed chain exercises. Increase resistance on  
  equipment.
›› Begin forward treadmill running program when 8” step down is satisfactory (No sooner than 12  
  weeks).
›› Initiate and slowly progress agility training, reciprocal running (figure 8s, smooth cutting drills,  
  start/stop, etc.).
›› Begin plyometrics and increase as tolerated.
›› Begin to wean patient from formal supervised therapy encouraging independence with home  
  exercise program.
›› Continue modalities prn as indicated above.
›› Heat before therapy sessions.
›› Ice after therapy sessions.

Weeks 18+ (Phase V):

›› Continue strengthening/flexibility
›› Initiate sport-specific agility drills and functional testing
›› Advance plyometric program starting at 22 weeks
›› Advance agility program at 22 weeks (Z cuts, backward to forward running, footwork drills, double leg  
  power jumps, alternate single leg jump rope)
›› Return to sports approx. 22-30 weeks post-operatively *(MD CLEARANCE REQUIRED)*
›› Continue modalities prn as indicated above.
›› Heat before therapy sessions.
›› Ice after therapy sessions.

For more information please visit: www.tsaog.com/drnuelle