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Sports Medicine and Shoulder Specialist

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THErapy PROTOCOL FOR ACL RECONSTRUCTION

Including surgery for anterolateral ligament (ALL), microfracture, meniscectomy or meniscus repair. See separate protocol for multi-ligament repair.

Note: While this is intended to be a guide, please tailor progression to the patient's surgical procedure and response to treatment. The diagnosis, the surgery performed, and the patient's pre-operative level all play important roles in the post-operative period. This protocol is a general timeline, and can be accelerated or decelerated according to each individual situation. The protocol is NOT intended to be a comprehensive outline of all activities and restrictions.

This therapy protocol is intended for current patients of Dr. Hansen who are actively under his care. Dr. Hansen reserves the right to change all or part of this protocol based on individual patient progress. Please contact our office if you have questions or concerns.

Thank you for your care of our shared patient!

Frequency: 2-3 times per week for 12-16 weeks; functional testing at 4 and 6 months

General Information:

- Surgery may also include one or more of the following:
 - Microfracture, anterolateral ligament reconstruction, meniscectomy, meniscus repair, bone graft
- Emphasis on early ROM to prevent contracture and to facilitate graft integration
- Strict NWB with brace locked during ambulation for 6 weeks if microfracture, meniscus repair, some bone graft procedures

1) Phase 1: Weeks 0-2

Goals: Protect surgical repair, decrease soreness and swelling, increase passive range of motion, inhibit further muscle atrophy

a) Precautions

- i) Day 1-3: Keep brace locked for ambulation, unlock or remove for ROM
- ii) Day 3+: Unlock knee brace, including during ambulation as tolerated
 - (1) Gradually advance WB status with crutches in the brace with brace unlocked
 - (2) Progress at tolerated to 50% WB (exceptions above)
 - (3) Use brace for 6 weeks
- b) Day of surgery:
 - i) Heel pumps
 - ii) Cold therapy
- c) Weeks 0-2
 - i) PROM as tolerated, stress early ROM
 - (1) Flexion to 90 degrees
 - (2) Full extension by week 2
 - (a) Consider 3 visits/week until full extension achieved (if visits available)
 - ii) Ankle pumps, straight leg raises, quad/glut sets, hamstring stretch
 - iii) Promote patella mobility

2) Phase 2: Weeks 2-4

Goal: normalize gait, full ROM

- a) Precautions
 - i) Ambulation with brace unlocked
- b) Weeks 2-4
 - i) Full AROM as tolerated
 - (1) Max 90 degrees flexion with meniscus repair until week 6
 - ii) Quad/hamstring isotonic/stretching, well leg exercises, proprioception training
 - iii) Stationary bike, shallow squats

3) Phase 3: Weeks 4-16

Goal: Advance functional ability, improve proprioception and endurance, prepare for running

- a) Precautions
 - i) Stress importance of restrictions to protect graft
 - ii) Wean use of crutches at week 6
 - iii) Wean use of brace (following crutch weaning) as tolerated
 - iv) No running until 4 months postop (5-6 months for meniscus repair, per surgeon for cartilage procedure)
- b) Weeks 4-12
 - i) Increase closed chain activities, increase proprioception training
 - ii) Leg press, bicycle for endurance, gradually initiate stairmaster/step-ups
- c) Weeks 9-11:
 - i) Full AROM as tolerated
- d) Week 10-12:
 - i) Gradual advancement of strengthening if full AROM achieved

- e) Weeks 13-16
 - i) Continue strengthening exercises
 - ii) Functional testing for return to running program prior to 4 month follow-up
 - (1) Recommend no initiation of running without therapist *and then* surgeon clearance
 - (2) Test parameters may be obtained by contacting Dr. Hansen's office

4) Phase 4: Weeks 16+

Goals: Advance running program

- a) Precautions
 - i) See timeline below
 - ii) Advance running following functional testing with therapist *and* MD clearance
 - (1) See functional testing guidelines at HansenSportsDoc.com
- b) Week 16
 - i) Gradually advance running program following clearance

5) Phase 5: Month 6+

Goals: Prepare for return to sport

- a) Precautions
 - i) Advance sport specific exercise at 6 months following functional testing with therapist *and* MD clearance
 - (1) See functional testing guidelines at HansenSportsDoc.com
 - ii) No return to full contact sport until 9 months postop
- b) Months 6-9
 - i) Continue directed home strengthening program
 - ii) Gradually advance non-contact sport-specific activities
- c) Months 9+
 - i) Gradually return to full sport with surgeon clearance and successful functional testing
 - (1) See functional testing guidelines at HansenSportsDoc.com

Guide to advance activity (as tolerated and pending surgeon approval):

- 3 weeks: sedentary work
- 4-6 weeks: driving automatic car if L knee surgery
- 10-12 weeks: driving
- 4 months: initiate running program (no meniscus repair or microfracture)
- 5-6 months: initiate running program (meniscus repair)
- 6-9 months: initiate running program (microfracture)
- 6 months: advance sport-specific activities (cutting, pivoting, jumping), non-contact only
- 9 months: return to full contact sport, use of brace as per surgeon instruction