

LCL Sprain

Diagnosis Explanation:

A **lateral collateral ligament (LCL) sprain** is an injury to the ligament on the outer side of the knee, which stabilizes the joint and prevents excessive sideways movement. It typically occurs due to a direct blow to the inside of the knee or sudden twisting motions. Symptoms include pain, swelling, tenderness along the outer knee, and instability, especially during lateral (side-to-side) movements. The severity is classified as:

- **Grade 1 (Mild):** Minor stretching, slight pain, no instability.
- **Grade 2 (Moderate):** Partial tear, swelling, some instability.
- **Grade 3 (Severe):** Complete tear, significant instability, may require bracing or surgery.

Specific Work Modifications:

- **If your job requires standing or walking:** Wear a **knee brace** for support and take breaks to sit when possible.
- **If your job involves lifting:** Avoid twisting motions and sudden side-to-side movements. Use proper lifting techniques.
- **If your job is desk-based:** Keep the knee **elevated** when sitting and perform gentle mobility exercises throughout the day.
- **Avoid:** Lateral (side-to-side) movements, prolonged standing, deep knee bending, and kneeling.

Specific Activity Modifications:

- **If you play sports (e.g., soccer, basketball, tennis):** Avoid **cutting, pivoting, and lateral movements** until fully healed. Instead, focus on **low-impact exercises** like swimming or cycling.
- **If you hike:** Stick to **flat trails** and avoid uneven terrain. Use **trekking poles** for added stability.
- **If you do weightlifting:** Avoid **lunges, squats, and lateral leg movements** until pain-free. Prioritize **controlled, low-impact exercises**.
- **Avoid:** Jumping, side lunges, sharp turns, and high-impact exercises until the knee is stable.

Recommended Supplements:

- **Collagen Peptides** - 10g daily for ligament and joint repair.
- **Vitamin C** - 500mg daily to support collagen production and healing.
- **Omega-3 Fatty Acids** - 1000mg daily to help reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for natural pain relief.

- **Glucosamine & Chondroitin** - 1500mg/1200mg daily for joint support.

Recommended Nutrition and Hydration:

- **Increase Lean Protein** (chicken, fish, eggs, tofu) to aid ligament repair.
- **Eat Anti-Inflammatory Foods** (berries, leafy greens, turmeric, nuts) to reduce swelling.
- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain joint lubrication.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to keep tissues hydrated and promote healing.

Home Exercise Prescription:

Early Phase (0-2 Weeks, Reducing Pain & Swelling):

- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression (with a brace or sleeve), Elevation.
- **Quadriceps Sets** - Tighten thigh muscles, hold for 5 seconds, repeat **10 reps, 3x/day**.
- **Ankle Pumps** - Move ankle up and down to improve circulation, **10 reps, 3x/day**.
- **Seated Knee Extensions** - Slowly extend knee, hold for 5 seconds, repeat **10 reps, 2x/day**.

Strengthening Phase (2-6 Weeks, Once Pain Decreases):

- **Straight Leg Raises** - Keep knee straight, lift leg, hold 5 seconds, repeat **10 reps, 2x/day**.
- **Glute Bridges** - Lie on back, lift hips while keeping hamstrings relaxed, **10 reps, 2x/day**.
- **Mini Squats (No Deep Bending)** - Slight knee bends while keeping weight on heels, **10 reps, 2x/day**.

Advanced Phase (6+ Weeks, Stability & Return to Activity):

- **Lateral Band Walks** - Step sideways with a resistance band around thighs, **10 steps each way, 2x/day**.
- **Step-Ups** - Step onto a low platform, push through the heel, repeat **10 reps, 2x/day**.
- **Stationary Cycling** - Low resistance for **10-15 minutes/day**.
- **Balance Exercises** - Stand on injured leg for **10-20 seconds**, increase as tolerated.

Helpful Books:

1. *The Knee Injury Bible: Everything You Need to Know About Knee Pain, Prevention, and Treatment* - Kevin R. Stone, MD.

2. *Sports Injury Prevention and Rehabilitation* - David Joyce & Daniel Lewindon.

Click here for more orthopedic patient information.

Contact a Key West orthopedic clinic or reach out to Dr. Jason Pirozzolo.