

Patellar Subluxation

Diagnosis Explanation:

Patellar subluxation occurs when the **kneecap (patella)** partially slides out of its **normal position** but does not fully dislocate. This often happens due to **weak thigh muscles, ligament laxity, trauma, or structural misalignment**. Symptoms include **knee pain, swelling, instability (feeling like the knee may "give out"), popping or clicking sensations, and occasional locking**. Recurrent subluxations increase the risk of cartilage damage and full dislocation.

Specific Work Modifications:

- **If your job requires standing or walking:** Use a **patellar-stabilizing brace** and take breaks to sit when needed.
- **If your job involves lifting:** Avoid **deep squats, twisting, or sudden side-to-side movements**.
- **If your job is desk-based:** Keep your knee **elevated** when sitting and perform gentle **mobility exercises** throughout the day.
- **Avoid:** Sudden knee twisting, kneeling, deep squats, and prolonged standing without breaks.

Specific Activity Modifications:

- **If you play sports:** Avoid **running, pivoting, and jumping** until your knee is stable. Try **swimming or cycling** instead.
- **If you hike:** Stick to **flat terrain** and use **trekking poles** for additional support.
- **If you do weightlifting:** Avoid **deep squats, lunges, and leg presses**. Instead, focus on **controlled strength exercises** for the hips and quads.
- **Avoid:** High-impact movements, sudden direction changes, and activities that cause knee instability.

Recommended Supplements:

- **Collagen Peptides** - 10g daily to strengthen ligaments and cartilage.
- **Glucosamine & Chondroitin** - 1500mg/1200mg daily for joint health.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Vitamin C** - 500mg daily to aid collagen production.
- **Calcium & Vitamin D** - 1000mg/800 IU daily for bone and joint support.

Recommended Nutrition and Hydration:

- **Increase Lean Protein** (chicken, fish, eggs, tofu) to support muscle and 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 joints hydrated.

Home Exercise Prescription (Rehabilitation for Patellar Subluxation)

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

- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression (patellar-stabilizing brace), Elevation.
- **Quadriceps Sets** - Tighten thigh muscles, hold for 5 seconds, repeat **10 reps, 3x/day**.
- **Heel Slides** - Gently slide heel toward buttocks to improve mobility, **10 reps, 2x/day**.
- **Ankle Pumps** - Move ankle up and down to improve circulation, **10 reps, 3x/day**.

Strengthening Phase (2-6 Weeks, Restoring Stability & Strength):

- **Straight Leg Raises** - Keep knee straight, lift leg, hold for 5 seconds, repeat **10 reps, 2x/day**.
- **Seated Knee Extensions** - Slowly extend knee, hold for 5 seconds, repeat **10 reps, 2x/day**.
- **Glute Bridges** - Lie on back, lift hips while keeping knees bent, **10 reps, 2x/day**.
- **Clamshells (Hip Strengthening)** - Lie on side, open and close knees, **10 reps, 2x/day**.

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

- **Mini Squats (No Deep Bending)** - Slight knee bends while keeping weight on heels, **10 reps, 2x/day**.
- **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** to improve knee stability.

Helpful Books:

1. *The Knee Injury Bible: Everything You Need to Know About Knee Pain, Prevention, and Treatment* - Kevin R. Stone, MD.
2. *Heal Your Knees: How to Prevent Knee Surgery and What to Do If You Need It* - Robert Klapper, MD, and Lynda Huey.

Click here for more orthopedic patient information.

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