

Patellar Tendinitis (Jumper's Knee)

Diagnosis Explanation:

Patellar tendinitis, or **jumper's knee**, is an **overuse injury** where the **patellar tendon** (which connects the kneecap to the shinbone) becomes irritated and inflamed. It is common in **athletes who jump, run, or squat frequently** (e.g., basketball, volleyball, soccer, or weightlifting). Symptoms include **pain and tenderness at the base of the kneecap, stiffness, swelling, and discomfort when squatting or using stairs**. If untreated, it can lead to chronic tendon degeneration (**patellar tendinosis**).

Specific Work Modifications:

- **If your job requires standing or walking:** Use **cushioned shoes** or **orthotics** to reduce knee stress and take frequent breaks.
- **If your job involves lifting:** Avoid **deep squatting and excessive knee bending**; use proper lifting techniques.
- **If your job is desk-based:** Keep your leg **elevated** when sitting and perform **gentle stretches** periodically.
- **Avoid:** Repetitive kneeling, deep squats, prolonged standing, and sudden knee stress.

Specific Activity Modifications:

- **If you run or play sports:** Reduce **jumping and sprinting**; opt for **swimming or cycling** instead.
- **If you hike:** Stick to **flat terrain**, wear **shock-absorbing footwear**, and use **trekking poles**.
- **If you do weightlifting:** Avoid **deep squats, lunges, and leg presses**; focus on **controlled, eccentric exercises** for the quads.
- **Avoid:** High-impact jumping, sprinting, deep bending, and repetitive knee stress.

Recommended Supplements:

- **Collagen Peptides** - 10g daily to support tendon healing.
- **Vitamin C** - 500mg daily to enhance collagen production.
- **Magnesium** - 300-400mg daily to aid muscle relaxation and prevent cramps.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.

Recommended Nutrition and Hydration:

- **Increase Lean Protein** (chicken, fish, tofu, eggs) to support tendon repair.
- **Eat Anti-Inflammatory Foods** (berries, leafy greens, turmeric, nuts) to reduce swelling.

- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain tendon elasticity.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to maintain tissue hydration and healing.

Home Exercise Prescription (Rehabilitation for Patellar Tendinitis)

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

- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression (patellar strap), Elevation.
- **Quadriceps Sets** - Tighten thigh muscles, hold for 5 seconds, repeat **10 reps, 3x/day**.
- **Hamstring Stretch** - Sit with one leg extended, reach for toes, **hold 20 seconds, 3x/day**.
- **Calf Stretch** - Stand with one foot forward, press heel down, **hold 20 seconds, 3x/day**.

Strengthening Phase (2-6 Weeks, Regaining Strength & Control):

- **Eccentric Squats (Decline Board)** - Slowly lower into a **partial squat** (not deep), **10 reps, 2x/day**.
- **Straight Leg Raises** - Keep knee straight, lift leg, hold for 5 seconds, repeat **10 reps, 2x/day**.
- **Glute Bridges** - Lie on back, lift hips while keeping knees bent, **10 reps, 2x/day**.
- **Seated Knee Extensions** - Slowly extend knee, hold for 5 seconds, repeat **10 reps, 2x/day**.

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

- **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 maintain mobility.
- **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. *Peak Performance: Elevate Your Game, Avoid Burnout, and Thrive with the New Science of Success* - Brad Stulberg & Steve Magness.

Click here for more orthopedic patient information.

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