

Prepatellar Bursitis

Diagnosis Explanation:

Prepatellar bursitis is **inflammation of the prepatellar bursa**, a fluid-filled sac in front of the kneecap (**patella**) that cushions and reduces friction. It is often caused by **repetitive kneeling, direct trauma, infection, or overuse**. Symptoms include **swelling in front of the kneecap, tenderness, warmth, and pain when bending the knee or applying pressure**. In severe cases, the bursa may become infected (**septic bursitis**), requiring antibiotics.

Specific Work Modifications:

- **If your job requires standing or walking:** Wear **shock-absorbing footwear** and avoid prolonged standing without breaks.
- **If your job involves kneeling:** Use **knee pads** or a cushioned surface to reduce pressure.
- **If your job is desk-based:** Keep the knee **elevated** when sitting and avoid prolonged knee flexion.
- **Avoid:** Direct pressure on the kneecap, excessive bending, deep squats, and prolonged standing without breaks.

Specific Activity Modifications:

- **If you run or play sports:** Avoid high-impact activities until swelling subsides; **switch to swimming or cycling** for low-impact movement.
- **If you hike:** Use **trekking poles** and avoid kneeling or excessive knee flexion on rough terrain.
- **If you do weightlifting:** Avoid **deep squats, lunges, and kneeling exercises**; focus on **controlled leg exercises without knee pressure**.
- **Avoid:** Kneeling, high-impact jumping, deep squats, and activities that worsen knee swelling.

Recommended Supplements:

- **Collagen Peptides** - 10g daily for soft tissue repair.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Vitamin C** - 500mg daily to promote collagen synthesis.
- **Turmeric (Curcumin)** - 500-1000mg daily for natural pain relief.
- **Magnesium** - 300-400mg daily to aid muscle relaxation.

Recommended Nutrition and Hydration:

- **Increase Lean Protein** (chicken, fish, tofu, eggs) to support tissue healing.
- **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 minimize inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to support joint health and healing.

Home Exercise Prescription (Rehabilitation for Prepatellar Bursitis)

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

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

Strengthening Phase (2-6 Weeks, Improving Stability & Mobility):

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

Advanced Phase (6+ Weeks, Strengthening & Preventing Recurrence):

- **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 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. *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.