

Knee Contusion

Diagnosis Explanation:

A **knee contusion** is a bruise on or around the knee caused by direct trauma, such as a fall, bump, or impact during sports or daily activities. This leads to pain, swelling, stiffness, and discoloration. While most knee contusions heal with conservative treatment, severe bruises may involve deeper tissue damage, including the bone.

Specific Work Modifications:

- **If your job requires standing or walking:** Take breaks to rest and elevate your knee when possible. Use cushioned footwear.
- **If your job involves lifting:** Avoid kneeling or putting direct pressure on the knee.
- **If your job is desk-based:** Keep the knee elevated when sitting and apply ice as needed.
- **Avoid:** Prolonged standing, excessive walking, kneeling, and any activity that puts pressure on the injured knee.

Specific Activity Modifications:

- **If you run or play sports:** Pause high-impact activities until swelling and pain subside. Opt for swimming or cycling instead.
- **If you hike:** Use trekking poles for support, and avoid uneven terrain.
- **If you do weightlifting:** Avoid direct knee pressure (e.g., kneeling exercises) and heavy leg workouts.
- **Avoid:** Jumping, deep squats, direct impact on the knee, and activities that worsen pain or swelling.

Recommended Supplements:

- **Vitamin C** - 500mg daily to promote tissue healing.
- **Collagen Peptides** - 10g daily to support soft tissue repair.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Bromelain (from Pineapple)** - 500mg daily for natural anti-inflammatory effects.

Recommended Nutrition and Hydration:

- **Eat Anti-Inflammatory Foods** (berries, leafy greens, turmeric, nuts) to reduce swelling.
- **Increase Protein Intake** (chicken, fish, eggs, tofu) to support tissue repair.
- **Consume Hydrating Foods** (watermelon, cucumber, citrus) to aid circulation and healing.
- **Limit Processed Foods & Sugars** to minimize inflammation.

- **Hydration:** Drink **8-10 cups of water daily** to keep tissues hydrated and promote recovery.

Home Exercise Prescription:

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

- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression (with a bandage), and Elevation.
- **Ankle Pumps** - Move ankle up and down to improve circulation, **10 reps, 3x/day**.
- **Heel Slides** - Gently slide heel toward buttocks to maintain mobility, **10 reps, 2x/day**.
- **Quadriceps Sets** - Tighten thigh muscles, hold for 5 seconds, repeat **10 reps, 3x/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**.
- **Seated Knee Extensions** - Extend knee while seated, hold for 5 seconds, repeat **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, Returning 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**.
- **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.