

Gluteal Muscle Strain

Explanation of Diagnosis

A **gluteal muscle strain** occurs when the **gluteus maximus, medius, or minimus muscles** are **overstretched or torn** due to **sudden movements, heavy lifting, sprinting, or overuse**. Symptoms include **pain in the buttocks, tenderness, weakness, difficulty sitting, walking, or climbing stairs, and swelling or bruising** in severe cases.

Specific Work Modifications

- **Avoid prolonged sitting**; use a **cushion or ergonomic chair** for comfort.
- **Take standing and stretching breaks** every 30-45 minutes.
- **Avoid repetitive bending, squatting, or heavy lifting** until pain subsides.
- **If walking is painful, modify tasks to limit movement.**
- **Use a cold pack at work** (15-20 minutes) if swelling or discomfort increases.

Specific Activity Modifications

- **Avoid high-impact activities** such as sprinting, heavy squats, or jumping.
- **Modify workouts** by switching to **low-impact exercises** such as swimming, cycling, or walking at a slow pace.
- **Use proper warm-ups and dynamic stretching** before returning to activity.
- **Gradually reintroduce strength training** with lower resistance and proper form.

Recommended Supplements

- **Collagen peptides (10 g daily)** - Supports muscle and tendon repair.
- **Vitamin C (500 mg daily)** - Aids in collagen synthesis for muscle recovery.
- **Magnesium (300-400 mg daily)** - Helps with muscle relaxation and reduces cramping.
- **Omega-3 fatty acids (1000 mg daily)** - Reduces muscle inflammation and stiffness.
- **Turmeric (500 mg twice daily)** - Provides natural anti-inflammatory benefits.

Recommended Nutrition and Hydration

Diet Recommendations:

- **Muscle-repair foods:** Lean protein (chicken, fish, eggs), legumes, and Greek yogurt.
- **Anti-inflammatory foods:** Fatty fish (salmon, sardines), turmeric, berries, nuts, and leafy greens.

- **Collagen-boosting foods:** Bone broth, citrus fruits, and bell peppers.
- **Limit processed foods, sugar, and alcohol**, which can slow recovery.

Hydration Tips:

- **Drink at least 2-3 liters of water daily** to support muscle function and tissue healing.
- **Electrolytes (potassium, sodium, magnesium)** may help prevent cramps and stiffness.

Home Exercise Prescription

Perform **2-3 times daily** to reduce pain and improve mobility:

Phase 1: Pain Relief & Mobility (Days 1-5, Reduce Swelling & Stiffness)

1. Ice Therapy

- Apply **ice pack for 15-20 minutes**, 3-4 times daily to reduce swelling.

2. Seated Glute Stretch

- Sit upright, cross one leg over the opposite knee, and gently press down.
- **Hold for 20-30 seconds, repeat 3 times per side.**

3. Pelvic Tilts

- Lie on your back with knees bent, tighten your core, and flatten your lower back.
- **10 reps, 2 times daily.**

Phase 2: Strength & Flexibility (After 5-7 Days, Once Pain Improves)

4. Glute Bridge

- Lie on your back, bend knees, and lift hips while squeezing the glutes.
- **10 reps, 2 times daily.**

5. Clamshell Exercise (Hip Stability)

- Lie on your side with knees bent, lift the top knee without moving your hips.
- **10 reps per side, 2 times daily.**

6. Standing Hip Extension

- Stand and extend one leg backward while keeping your knee straight.
- **10 reps per leg, 2 times daily.**

Phase 3: Strength & Return to Activity (After 2-3 Weeks, If Pain-Free)

7. Bodyweight Squats (If Comfortable)

- Keep your weight in the heels and avoid deep squatting.
- **10 reps, 2 times daily.**

8. Lunges (Only If Pain-Free)

- Step forward and slowly lower, avoiding excessive hip strain.
- **10 reps per leg, 2 times daily.**

⚠ Avoid explosive movements (jumping, sprinting, heavy lifting) until fully healed (typically 3-6 weeks).

Helpful Books

1. *"Rehab Science: How to Overcome Pain and Heal from Injury"* - Tom Walters, DPT
2. *"The Anatomy of Stretching: A Guide to Flexibility and Injury Prevention"* - Brad Walker

Click here for more orthopedic patient information.

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