

Pelvic Avulsion Fracture

Explanation of Diagnosis

A **pelvic avulsion fracture** occurs when a **tendon or ligament pulls a piece of bone away from the pelvis**, usually at the **hip flexors (ASIS)**, **hamstrings (ischial tuberosity)**, or **adductors (pubic bone)**. This injury commonly affects **young athletes involved in sprinting, jumping, or sudden acceleration sports (soccer, track, gymnastics)**. Symptoms include **sharp pain at the injury site, swelling, bruising, weakness, and difficulty walking or moving the leg**.

Specific Work Modifications

- **Avoid prolonged standing, walking, or weight-bearing activities** until cleared by a doctor.
- **Use crutches or a walker** if non-weight-bearing is required.
- **Modify tasks** to limit bending, lifting, or excessive leg movement.
- **Use a cushioned seat or ergonomic chair** to reduce strain.
- **Apply ice (15-20 min, 3-4 times daily)** if swelling increases.

Specific Activity Modifications

- **Avoid high-impact activities** (running, jumping, sprinting, or heavy lifting).
- **Modify workouts** by switching to **non-weight-bearing exercises** like swimming or stationary cycling (once cleared by a doctor).
- **Perform controlled mobility and strengthening exercises** before returning to activity.
- **Gradually reintroduce sports and weight-bearing movements after healing.**

Recommended Supplements

- **Collagen peptides (10 g daily)** - Supports bone and soft tissue healing.
- **Vitamin D3 (1000-2000 IU daily)** - Aids in calcium absorption for bone repair.
- **Calcium (1000-1200 mg daily)** - Strengthens bones and accelerates fracture healing.
- **Magnesium (300-400 mg daily)** - Helps with muscle relaxation and recovery.
- **Omega-3 fatty acids (1000 mg daily)** - Reduces inflammation and promotes tissue repair.

Recommended Nutrition and Hydration

Diet Recommendations:

- **Bone-healing foods:** Dairy, leafy greens, almonds, salmon, and fortified cereals.
- **Anti-inflammatory foods:** Fatty fish (salmon, sardines), turmeric, berries, walnuts, and olive oil.
- **Protein-rich foods:** Chicken, eggs, lentils, and dairy to support muscle and ligament repair.
- **Limit processed foods, sugar, and alcohol,** which can slow healing.

Hydration Tips:

- **Drink at least 2-3 liters of water daily** to maintain joint lubrication and circulation.
- **Limit caffeine and alcohol,** which can interfere with calcium absorption.

Home Exercise Prescription

Follow weight-bearing restrictions as advised by your doctor. Avoid aggressive stretching or high-impact movements.

Phase 1: Pain Relief & Mobility (Weeks 1-3, Reduce Swelling & Maintain Movement)

1. **Ankle Pumps & Toe Wiggles** (For Circulation)
 - Move the ankle up and down to promote circulation.
 - **10 reps, 3 times daily.**
2. **Pelvic Tilts (Gentle Core Activation)**
 - Lie on your back with knees bent, tighten your core, and flatten your lower back.
 - **10 reps, 2 times daily.**
3. **Seated Knee Extensions**
 - Sit with feet flat, slowly straighten the affected leg, then lower it.
 - **10 reps per leg, 2 times daily.**

Phase 2: Strength & Stability (Weeks 4-8, Once Cleared for Light Weight-Bearing)

4. **Glute Bridges (Core & Hip Activation)**
 - Lie on your back, bend knees, and lift hips while squeezing the glutes.
 - **10 reps, 2 times daily.**
5. **Clamshells (Hip Abductor Strengthening)**
 - 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 Abduction (Controlled Motion)**

- Stand tall and lift one leg sideways without tilting the torso.
- **10 reps per leg, 2 times daily.**

Phase 3: Return to Activity (Weeks 8+, If Pain-Free & Doctor Approved)

7. Bodyweight Squats (Avoid Deep Squats Initially)

- Keep weight in heels and avoid excessive hip flexion.
- **10 reps, 2 times daily.**

8. Single-Leg Balance Exercise

- Stand on the affected leg for **15-30 seconds**, increasing time as tolerated.
- **Repeat 2-3 times per leg.**

Avoid sprinting, jumping, deep squatting, and cutting movements until fully healed (typically 8-12 weeks).

Helpful Books

1. *"The Healthy Runner's Handbook: Injury Prevention & Recovery"* - Jason Karp, PhD
2. *"Rehab Science: How to Overcome Pain and Heal from Injury"* - Tom Walters, DPT

Click here for more orthopedic patient information.

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