

Abdominal Muscle Strain

Diagnosis Explanation:

An **abdominal muscle strain** is a **partial or complete tear** of the abdominal muscles, typically caused by **sudden twisting, heavy lifting, intense exercise, or direct trauma**. It often affects the **rectus abdominis (six-pack muscle), obliques, or transverse abdominis**. Symptoms include **sharp or aching pain in the abdomen, swelling, bruising, muscle spasms, and pain with coughing, sneezing, or core movements**.

Specific Work Modifications:

- **If your job requires standing or walking:** Maintain good posture and take **frequent seated breaks** to rest the core.
- **If your job involves lifting:** Avoid **heavy lifting, twisting, or sudden bending**. Use proper lifting techniques.
- **If your job is desk-based:** Sit **upright with lumbar support**, avoid slouching, and stand up periodically to stretch.
- **Avoid:** Heavy lifting, prolonged standing, deep bending, sudden twisting, and excessive reaching overhead.

Specific Activity Modifications:

- **If you run or play sports:** Avoid **sudden twisting, sprinting, and high-impact exercises** until pain subsides.
- **If you do yoga or Pilates:** Modify movements to **avoid deep core engagement or stretching the abs excessively**.
- **If you do weightlifting:** Avoid **sit-ups, crunches, deadlifts, and overhead pressing** until fully healed.
- **Avoid:** Any exercise that causes abdominal strain, excessive stretching, or heavy resistance training.

Recommended Supplements:

- **Collagen Peptides** - 10g daily for muscle and tendon repair.
- **Magnesium** - 300-400mg daily to reduce muscle cramps and spasms.
- **Vitamin C** - 500mg daily to support collagen synthesis.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Protein Supplement (if needed)** - 20-30g post-exercise to aid muscle healing.

Recommended Nutrition and Hydration:

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

swelling.

- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain tissue hydration.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily**, and consider **electrolyte drinks** if sweating frequently.

Home Exercise Prescription (Rehabilitation for Abdominal Muscle Strain)

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

- **RICE Protocol** - Rest, Ice (15-20 min, 3x/day), Compression (if needed), Elevation (if swelling is present).
- **Diaphragmatic Breathing** - Lie on your back, inhale deeply into the belly, exhale slowly, **10 breaths, 3x/day**.
- **Pelvic Tilts** - Lie on your back, gently tilt pelvis up and down to activate the core, **10 reps, 2x/day**.
- **Seated Side Stretch** - Sit upright, gently stretch to each side, **hold 20 seconds, 3x/day**.

Strengthening Phase (2-6 Weeks, Regaining Core Stability):

- **Dead Bug Exercise (Modified)** - Lie on back, lift one leg at a time while engaging the core, **10 reps, 2x/day**.
- **Glute Bridges** - Engage the core while lifting hips, **10 reps, 2x/day**.
- **Standing Side Bends (No Weights)** - Hands on hips, bend side to side gently, **10 reps, 2x/day**.

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

- **Plank (Modified, on Knees)** - Hold for **10-20 seconds**, increase gradually.
- **Bird Dog Exercise** - On hands and knees, extend opposite arm and leg, **10 reps, 2x/day**.
- **Standing Core Rotations (Light Resistance Band)** - Gentle rotational movements, **10 reps each side, 2x/day**.

Helpful Books:

1. *The Core Strength Training Bible: A Guide to Functional Workouts & Injury Prevention* - Dr. David Oliver.
2. *Built from Broken: A Science-Based Guide to Healing Pain & Preventing Injury* - Scott Hogan.

Click here for more orthopedic patient information.

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