

Brachial Plexus Injury (Stinger)

Diagnosis Explanation:

A **brachial plexus injury**, commonly called a **stinger** or **burner**, occurs when the **nerves in the brachial plexus (neck and shoulder region) are stretched or compressed**, usually due to a **forceful impact, sudden head tilting, or direct trauma**. This is common in **contact sports (football, wrestling, rugby), falls, or motor vehicle accidents**.

Symptoms:

- **Sharp, burning pain** radiating from the neck to the arm.
- **Numbness or tingling** in the shoulder, arm, or fingers.
- **Temporary weakness** in the affected arm.
- **Symptoms usually last seconds to minutes but may persist for hours or days in severe cases.**

Specific Work Modifications:

- **If your job requires standing or walking:** Maintain **good posture**, avoid carrying heavy loads on the injured side, and take **breaks to rest the arm**.
- **If your job involves lifting:** Avoid **heavy lifting, overhead work, or sudden neck and shoulder movements**. Use both hands when possible.
- **If your job is desk-based:** Adjust your **monitor to eye level**, use a **headset instead of cradling a phone**, and take breaks every **30 minutes** to stretch.
- **Avoid:** Overhead reaching, carrying heavy objects, and repetitive shoulder or neck movements.

Specific Activity Modifications:

- **If you play sports:** Avoid **contact sports and impact activities** until strength and sensation return fully. **Use neck and shoulder padding** when returning to play.
- **If you do weightlifting:** Avoid **overhead presses, shrugs, deadlifts, and heavy lifting** until symptoms resolve.
- **If you do yoga or Pilates:** Modify poses to **avoid excessive neck extension, deep stretches, or weight-bearing on the injured arm**.
- **Avoid:** Sudden head and neck movements, aggressive stretching, and high-impact activities.

Recommended Supplements:

- **Magnesium** - 300-400mg daily to relax muscles and support nerve function.
- **Vitamin B12** - 1000mcg daily to promote nerve healing.

- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.
- **Collagen Peptides** - 10g daily for ligament and nerve support.

Recommended Nutrition and Hydration:

- **Eat Anti-Inflammatory Foods** (salmon, leafy greens, turmeric, berries, nuts) to support nerve healing.
- **Increase Lean Protein** (chicken, fish, tofu, eggs) to aid muscle recovery.
- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain tissue elasticity.
- **Limit Processed Foods & Sugars** to prevent inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to keep nerves and muscles hydrated.

Home Exercise Prescription (Rehabilitation for Brachial Plexus Injury)

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

- **Neck Side Bends** - Slowly tilt head to each side, hold **20 seconds**, repeat **3x/day**.
- **Shoulder Blade Squeezes** - Pinch shoulder blades together, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **Nerve Glides (Median Nerve Stretch)** - Extend the affected arm out to the side, gently bend and straighten the wrist, **10 reps, 2x/day**.
- **Upper Trap Stretch** - Gently pull head to the opposite side, hold **20 seconds**, repeat **3x/day**.

Strengthening Phase (2-6 Weeks, Restoring Mobility & Strength):

- **Isometric Neck Holds** - Press hand against forehead or side of head, resist motion, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **External Rotation (Resistance Band)** - Keep elbow at **90 degrees**, rotate forearm outward, **10 reps, 2x/day**.
- **Wall Slides** - Stand facing a wall, slide arms up slowly, **10 reps, 2x/day**.

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

- **Resistance Band Rows** - Pull band toward chest while keeping back straight, **10 reps, 2x/day**.
- **Scapular Stability Exercises** - Maintain good posture while performing controlled shoulder movements, **10 reps, 2x/day**.
- **Swimming or Light Arm Cycling** - **15-20 minutes/day** to restore endurance.

Helpful Books:

1. *The Nerve Injury Handbook: Strategies for Recovery and Prevention* - Andrea Garmendia, MD.
2. *Treat Your Own Neck* - Robin McKenzie (self-treatment strategies for nerve-related

neck pain).

Click here for more orthopedic patient information.

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