

Spondylolisthesis

Diagnosis Explanation:

Spondylolisthesis occurs when one **vertebra slips forward** over the one below it, usually in the **lower back (lumbar spine)**. It can result from **stress fractures, aging, degenerative disc disease, or congenital defects**. Symptoms range from **mild low back pain** to **radiating leg pain (sciatica), stiffness, muscle spasms, and difficulty standing or walking for long periods**.

Specific Work Modifications:

- **If your job requires standing or walking:** Use **supportive footwear**, maintain a **neutral spine**, and take **frequent seated breaks**.
- **If your job involves lifting:** Avoid **heavy lifting, bending, and twisting**. Use **proper lifting techniques** and consider wearing a **lumbar brace** if necessary.
- **If your job is desk-based:** Use an **ergonomic chair with lumbar support**, keep **feet flat on the floor**, and take **standing breaks every 30-60 minutes**.
- **Avoid:** Prolonged sitting or standing, repetitive bending, heavy lifting, and twisting motions.

Specific Activity Modifications:

- **If you run or play sports:** Reduce high-impact activities and switch to **swimming, cycling, or walking on soft surfaces**.
- **If you hike:** Use **trekking poles**, avoid steep inclines, and limit backpack weight.
- **If you do weightlifting:** Avoid **deadlifts, heavy squats, and overhead presses**; focus on **core stability exercises**.
- **Avoid:** High-impact activities, excessive bending backward (hyperextension), and twisting.

Recommended Supplements:

- **Collagen Peptides** - 10g daily to support discs and ligaments.
- **Calcium & Vitamin D3** - 1000mg/800 IU daily for bone strength.
- **Magnesium** - 300-400mg daily to relax muscles and prevent spasms.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.

Recommended Nutrition and Hydration:

- **Eat Anti-Inflammatory Foods** (salmon, leafy greens, turmeric, berries, nuts) to reduce pain and stiffness.
- **Increase Lean Protein** (chicken, fish, tofu, eggs) to support muscle and ligament healing.

- **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** to keep spinal discs hydrated.

Home Exercise Prescription (Rehabilitation for Spondylolisthesis)

Early Phase (0-2 Weeks, Reducing Pain & Stabilizing the Spine):

- **Pelvic Tilts** - Lie on your back, flatten your lower back against the floor, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **Cat-Cow Stretch** - On hands and knees, arch and round your back, repeat **10 reps, 2x/day**.
- **Child's Pose** - Sit back onto heels, stretch arms forward, hold **20 seconds, 3x/day**.
- **Standing Back Extensions** - Hands on lower back, gently lean backward, hold **5 seconds**, repeat **10 reps, 2x/day**.

Strengthening Phase (2-6 Weeks, Improving Core & Hip Stability):

- **Glute Bridges** - Lie on your back, lift hips while engaging the core, **10 reps, 2x/day**.
- **Bird Dog Exercise** - On hands and knees, extend opposite arm and leg, **hold 5 seconds**, repeat **10 reps, 2x/day**.
- **Seated Rows (Resistance Band)** - Pull band toward chest while keeping back straight, **10 reps, 2x/day**.

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

- **Side Planks (Modified if Needed)** - Hold for **10-20 seconds**, increase gradually.
- **Standing Hamstring Stretch** - Place foot on an elevated surface, lean forward slightly, **hold 20 seconds, 3x/day**.
- **Stationary Cycling or Swimming** - **15-20 minutes/day** for low-impact strengthening.

Helpful Books:

1. *Treat Your Own Back* - Robin McKenzie (self-treatment techniques for spinal health).
2. *The Spondylolisthesis Handbook: A Guide for Patients, Caregivers, and Practitioners* - Joanne Broatch.

Click here for more orthopedic patient information.

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