

Scoliosis

Diagnosis Explanation:

Scoliosis is a **sideways curvature of the spine** that can be **structural** (permanent curve due to bone or muscle imbalances) or **functional** (temporary curve due to posture, leg length discrepancy, or muscle tightness). Symptoms vary from **mild back discomfort** to **uneven shoulders, hip misalignment, and muscle fatigue**. Severe cases may cause **breathing difficulties or nerve compression**.

Specific Work Modifications:

- **If your job requires standing or walking:** Wear **supportive shoes**, stand with **weight evenly distributed**, and take **seated breaks** as needed.
- **If your job involves lifting:** Avoid **twisting motions** and use **proper lifting mechanics** by engaging the core and bending the knees.
- **If your job is desk-based:** Use an **ergonomic chair with lumbar support**, keep **feet flat on the floor**, and adjust the **monitor to eye level**.
- **Avoid:** Prolonged standing or sitting without breaks, heavy lifting, and uneven weight distribution.

Specific Activity Modifications:

- **If you run or play sports:** Focus on **low-impact activities** like swimming or cycling; avoid excessive **twisting sports (tennis, golf)**.
- **If you do yoga or Pilates:** Modify poses to **avoid deep spinal twisting or excessive back bending**.
- **If you do weightlifting:** Avoid **deadlifts, heavy squats, and unilateral exercises**; emphasize **core and postural stability exercises**.
- **Avoid:** High-impact activities, prolonged asymmetrical movements, and excessive spinal rotation.

Recommended Supplements:

- **Collagen Peptides** - 10g daily for spinal and joint health.
- **Calcium & Vitamin D3** - 1000mg/800 IU daily for bone density support.
- **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:

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

- **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 support spinal disc hydration and flexibility.

Home Exercise Prescription (Rehabilitation for Scoliosis)

Early Phase (0-2 Weeks, Reducing Pain & Improving Posture Awareness):

- **Pelvic Tilts** - Lie on your back, flatten lower back against the floor, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **Cat-Cow Stretch** - On hands and knees, arch and round back, **10 reps, 2x/day**.
- **Thoracic Extension Stretch (Over Foam Roller or Chair Back)** - Hold **20 seconds, 3x/day**.
- **Side Stretch (Opposite of Curve)** - Reach arm overhead, gently stretch **away from the curve**, hold **20 seconds, 3x/day**.

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

- **Bird Dog Exercise** - On hands and knees, extend opposite arm and leg, hold **5 seconds**, repeat **10 reps, 2x/day**.
- **Glute Bridges** - Engage the core while lifting hips, **10 reps, 2x/day**.
- **Side Planks (Modified if Needed)** - Hold **10-20 seconds**, increase gradually.

Advanced Phase (6+ Weeks, Preventing Progression & Enhancing Strength):

- **Resistance Band Rows** - Pull band toward chest, keeping back straight, **10 reps, 2x/day**.
- **Standing Core Rotations (Light Resistance Band)** - Gently rotate torso without over-twisting, **10 reps each side, 2x/day**.
- **Swimming or Pilates-Based Core Work** - **15-20 minutes/day** to strengthen postural muscles.

Helpful Books:

1. *Scoliosis and the Human Spine* - Martha C. Hawes (scientific and holistic approaches to scoliosis management).
2. *The Schroth Method: Three-Dimensional Treatment for Scoliosis* - Christa Lehnert-Schroth (exercise-based scoliosis therapy).

Click here for more orthopedic patient information.

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