



Therapeutic Guides For Prescription Exercise Using The Stability Ball

For Use By The Referring Physician Or Therapist

This guide provides programs for surgical and non-surgical patients and is meant to provide recommendations as well as to serve as an adjunct to existing programs.

The timing of the initiation of these exercises, including but not limited to frequency, intensity and duration should be determined by the prescribing physician and determined on an individual basis.

EXERCISE PROGRAM FOR THE CERVICAL SPINE

This program is recommended for patients with cervical spine pain. Patients who have degenerative disc disease, osteoarthritis, and muscular sprains and strains such as whiplash should benefit from these exercises. It may also be beneficial for patients who have recently cervical spine surgery.

1. **Spinal Warm-Up** (page 6) - This exercise will work the entire spine to improve range of motion and facilitate flexibility of the muscles.
2. **Spinal Warm-Up with Ball** (page 7) - This builds on the prior exercise emphasizing core muscles as well as the upper extremities.
3. **Stretch and Breath** (page 9) - Proper breathing will minimize the increase in interthecal pressure while exercising.
4. **Neck Warm-Up** (page 10) - Simple non resistive exercises reduce stress and tight muscles.

NOTE: When a patient reaches maximum obtainable range of motion, a minimal level of discomfort, and reasonable strength then this program should be performed in conjunction with other spinal exercises, including the use of resistance for power and strength.

EXERCISE PROGRAM FOR THE THORACIC REGION

This program is recommended for patients with postural pathologies. It may also be beneficial for arthritic patients and some post surgical procedures.

1. **Spinal Warm-Up** (page 6) - This exercise will work the entire spine to improve range of motion and facilitate flexibility of the muscles.
2. **Spinal Warm-Up with Ball** (page 7) - This builds on the prior exercise emphasizing core muscles as well as the upper extremities.
3. **Stretch and Breath** (page 9) - Proper breathing will minimize the increase in interthecal pressure while exercising.
4. **Hip Flexibility** (page 11) - Although emphasizing hip and pelvic motion there is benefit in the thoracic spine region as the patient is allowed to move through full spinal motion.
5. **Posture** (page 12) - Essential to promote support of the spine and taking pressure off of the discs.
6. **Spine Flexion and Extension** (page 13) - Working the spine in this position supported by the ball promotes flexibility that cannot be achieved a flat surface.
7. **Dynamic Movement** (page 14) - An advanced exercise using gravity for patients who can medically tolerate more resistance.
8. **Upper Back Directional Exercise** (page 23) - Maximizes the amount of muscle groups that can be challenged at one time.
9. **Modified Plank Exercise #1** (page 28)
10. **Modified Plank Exercise #2** (page 29) - The plank exercises should be performed progressively and promote balance, strength and flexibility.
11. **Wall Push-Ups** (page 32) - Good for strengthening the upper body and promoting good posture.
12. **Resistive Trunk Exercises** (page 19) - An advanced exercise which requires different size premium medicine balls allowing the patient to visualize their progress.

EXERCISE PROGRAM FOR THE LUMBAR REGION

This program is recommended for patients with biomechanical abnormalities caused by weak core muscles. If performed properly, these exercises should increase tolerance for sitting and standing.

1. **Body Position** (page 8) - Promotes good posture and is the basis of all spinal related exercises.
2. **Hip Flexibility** (page 11) - Although emphasizing hip and pelvic motion there is benefit in the thoracic spine region as the patient is allowed to move through full spinal motion.
3. **Spine Flexion and Extension** (page 13) - Working the spine in this position supported by the ball promotes flexibility that cannot be achieved a flat surface.
4. **Resistive Trunk Exercises** (page 19) - An advanced exercise which requires different size premium medicine balls allowing the patient to visualize their progress.
5. **Supine Leg Press** (page 20) - An option for those patients to increase movement and strength in both the lower back and lower extremities.
6. **Abdominal Strengthening #1** (page 17)
7. **Abdominal Strengthening #2** (page 18) - Building blocks of core muscles.
8. **Spinal Extension Exercises** (page 26) - Working opposing muscle groups is essential for balance.
9. **The Prone Cross-Crawl** (page 27) - Helps promote balance and neurological development.
10. **Modified Plank Exercise #1** (page 28)
11. **Modified Plank Exercise #2** (page 29) - The plank exercises should be performed progressively and promote balance, strength and flexibility .
12. **Side Bends** (page 30) - Side bends work muscle groups that are often overlooked in achieving basic core stability.

EXERCISE PROGRAM FOR UPPER BODY REGION

This program is recommended for patients with upper extremity imbalance, weakness and some post surgical procedures.

1. **Resistive Trunk Exercises** (page19) - An advanced exercise which requires different size premium medicine balls allowing the patient to visualize their progress.
2. **Upper Back Directional Exercise** (page 23) - Maximizes the amount of muscle groups that can be challenged at one time.
3. **Basic Upper Body Resistive Exercises** (page 24) - Develops strength and allows the patient to measure their progress.
4. **Basic Upper Body Resistive Exercises with Exercise Chords** (page 25) - Develops power and can easily be performed at home.
5. **The Prone Cross-Crawl** (page 27) - Helps promotes balance and neurological development.
6. **Wall Push-Ups** (page 32) - Works the upper body while teaching the patient to maintain proper spinal posture.