IMG PHYSICAL THERAPY

Understanding Spondylolysis & Spondylolisthesis

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What Is Spondylolysis?

- Spondylolysis is a stress fracture typically found in the lumbar spine
- It often develops from repeated bending backward, twisting, or high-impact sports, rather than from a single major injury.
- Common in …
  - Adults over 60
  - Gymnasts
  - Football players
  - Dancers

What Is Spondylolisthesis?

- Spondylolisthesis happens when one vertebra slips forward over the bone below it.
- Often develops with aging, physical trauma, and bone diseases (ex. osteoporosis)
- Common in …
  - Adults 50 and over
  - Rapid growth spurt
  - Gymnasts
  - Dancers
  - Cheerleaders

Common Symptoms

- Low back pain
- Pain when bending backward
- Pain after sports or activity
- Tight hamstrings
- Muscle stiffness

Other signs

- Pain in your buttock or leg
- Numbness or tingling
- Weakness

Goals of Physical Therapy

- Reduce pain
- Improving strength
- Improving movement
- Getting back to ADL's
- Reducing the chance of having surgery if possible
- Avoid extension (bending backwards)

When to Call the Physcical Therapist

- New leg weakness
- Trouble walking
- Loss of bladder or bowel control
- Numbness around your groin or buttocks
- Severe pain after a fall or injury

Rehabilitation Plan

Phase I

Hamstring stretch: 3x 30 sec

Lie on your back and loop a strap around one foot. Slowly straighten your leg and gently pull the strap toward you until you feel a stretch in the back of your thigh. Hold for 20–30 seconds, then switch legs.



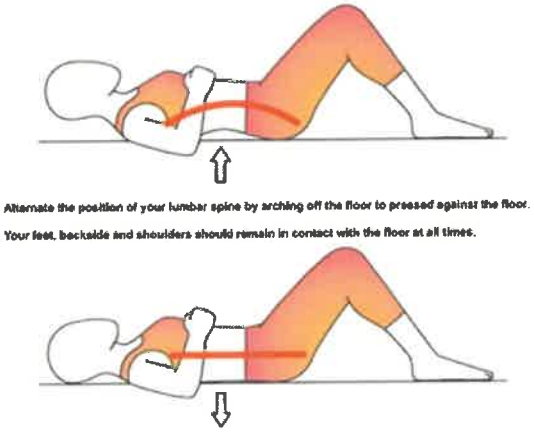
IT Band stretch: 3x 30s

For the supine IT band stretch, lie on your back, lift one leg, and gently guide it across your body with a strap while keeping your pelvis still. Hold for 20–30 seconds and repeat 2–3 times per side.



Pelvic Tilts: 3 sets, 10-15 reps

Lie on your back with your knees bent. Gently tilt your pelvis to flatten your lower back against the floor, then relax. Repeat 10–15 times.



Supine Marching: 3 sets, 10- 15 each leg

Lie on your back with your knees bent. Tighten your core and slowly lift one foot off the floor, then lower it and switch legs. Repeat 10–15 times.



Rehabilitation Plan

Phase I

Clamshells: 1 set, 10-15 reps

Lie on your side with your knees bent. Keep your feet together and lift your top knee without rotating your hips. Lower it slowly and repeat 10–15 times, then switch sides.



Recombant Bike: 5 minutes

Pedal at a comfortable pace for 5 minutes.



Repeated Flexion

(only if there is no pain with the motion): 5- 10 times

Lie on your back with your knees bent. Gently pull both knees toward your chest, then return to the starting position. Repeat slowly for 10–15 reps.



Ball Rollouts: 1 set, of 15

Kneel with your hands on a stability ball. Slowly roll the ball forward while keeping your core tight, then return to the starting position. Repeat 10–15 times.

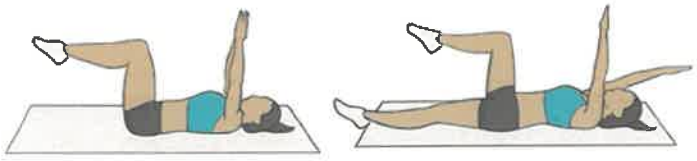


Rehabilitation Plan

Phase II

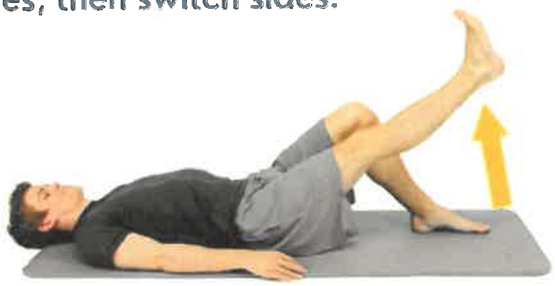
Dead Bugs: 1 set, 10 reps

Lie on your back with your arms up and knees bent. Slowly lower the opposite arm and leg toward the floor, then return to the starting position and switch sides. Repeat 10–15 times.



Supine Straight leg raise: 1 set, 10-15 reps

Lie on your back with one knee bent and the other leg straight. Tighten your core and slowly lift the straight leg to the height of the opposite knee. Lower it back down with control and repeat 10–15 times, then switch sides.



Supine Marches with a resistance band: 1 set, 10-15 reps

Lie on your back with a resistance band around your thighs and your knees bent. Tighten your core and slowly lift one foot off the floor while keeping tension on the band. Lower it back down and switch sides. Repeat for 10–15 reps.



Pallof Press 1 set, 10-15 reps

Stand with your side facing the resistance band. Hold the band with both hands at your chest, then press your hands straight out while keeping your core tight. Return to your chest and repeat 10–15 times, then switch sides.



Rehabilitation Plan

Phase II

Monster Walks with band: 2 laps

Place a resistance band around your thighs or ankles. Bend slightly at the knees and hips, then take controlled steps forward and diagonally while keeping tension on the band, complete 2 laps.



Recombant Bike: 5-10 mins

Pedal at a comfortable pace for 5-10 minutes.



Repeated Flexion

(only if there is no pain with the motion): 5- 10 times

Lie on your back with your knees bent. Gently pull both knees toward your chest, then return to the starting position. Repeat slowly for 10–15 reps.



Ball Rollouts: 2 sets of 15

Kneel with your hands on a stability ball. Slowly roll the ball forward while keeping your core tight, then return to the starting position. Repeat 10–15 times.



For more information, contact IMG PT
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