



Core stabilization and pelvic mobility training for a 28-week pregnant female with low back and sciatic nerve pain

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BACKGROUND AND PURPOSE:

Low back pain is a common complaint affecting around 78% of the pregnant female population.¹ Sciatic nerve pain is a common occurrence during the third trimester.¹ During pregnancy core stabilization muscles become weak with prolonged poor posture.^{2,3} Recent studies have shown that strengthening of these muscles decreases the likelihood of reoccurring back pain; however, no studies have shown the effectiveness of core stabilization exercises during pregnancy for treatment of low back pain.^{4,5}

The purpose of this case study is to determine the effects of core stabilization and pelvis mobility training for a 28-week pregnant female to improve function and decrease pain.

CASE DESCRIPTION:

Low back and sciatic nerve pain

Body Function and Structure

Lower Extremity Strength Deficits
Posture
Muscle Flexibility Deficits

Activity Limitations

Walking
Prolonged Standing
Sleeping

Participation Restrictions

Work-related duties
Walks with husband

Environmental Factors

Ten hour work shifts

Personal Factors

Female
30 years old
28-weeks pregnant

METHODS:



Pelvic Tilts



Pelvic Circles



Hip Marches



Hip Drivers

Outcome Measure		Initial Examination	Treatment Session 5
Modified Oswestry Disability Questionnaire		32%	24%
Manual Muscle Test	Hip flexion	4/5	5/5
	Hip external rotation	4/5	4/5
	Hip internal rotation	4/5	4/5
	Hip Abduction	4/5	4+/5
	Hip Adduction	4+/5	5/5
Muscle Length Test	Knee extension	4/5	5/5
	Hamstrings Straight Leg Raise	65°	75°

CONCLUSION:

Low back pain during pregnancy is a common occurrence that affects a majority of the population.¹ Over the five treatment sessions, the patient was able to tolerate a full ten hour work shift and sleep through the night. She also showed improvements in muscle strength and flexibility.

As seen in non-pregnant females, the patient was able to have a decrease in pain and improvement in function with these techniques.⁴



CLINICAL APPLICATION:

Core stabilization and pelvic mobility training will improve function and decrease pain in pregnant females with low back pain. Combined with soft tissue massage and lower extremity strengthening exercises, physical therapists can utilize these exercises for future patients.

REFERENCES:

Scan here for references.

