

Physician Alert

Case Report

62 year old female with right hip pain

Testimonial

Before coming to Kinetic I felt like I was going to have to give up being active and enjoying the outdoors. My right hip would hurt anytime I was gardening, walking, or in aerobics class. It was great to finally get relief after a year of doctors visits, medications, and other treatments that did not help.

I have since been able to return to my 3 mile walks without difficulty as well as continue with my land and water aerobics combination. I also have been able to comfortably snowshoe and/or cross country ski up north on the weekends. I am so happy to be back to my routines without pain. And, I will be returning to my spring job at the Nursery as I can walk the work line now.

Thanks for all you help and support during my rehab. I very much appreciate your patience in working things through with me.

ABSTRACT

RW is a 62 year old female with a history of right hip pain that increased with walking, ADLs, and fitness/recreational activity. She has previously been diagnosed with hip impingement syndrome. RW has tried multiple treatments including chiropractic and physical therapy without success before seeking treatment at Kinetic Physical Therapy Institute. Biomechanical assessment reveals pelvic, trunk, and scapular asymmetry. These results indicated a need for 10 Postural Restoration exercise sessions. Following treatment, the patient returned to previous functional level including full participation in recreational and fitness activity without symptoms. RW's experience confirmed that physical therapy at Kinetic is a very positive treatment alternative to help referring providers successfully treat patients suffering from unresolved chronic pain.

(Details of study on back.)



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History

RW is a 62 year old female with a 2 year history of right hip pain that increased with walking, fitness/recreational activity, and part-time work as a gardener. She also described that the pain affected her ability to sleep and would wake her in the night occasionally. Her only relief prior to therapy was to stop all activity. In addition to the hip pain, she experienced pain that radiated from the right groin to the right knee. X-ray of the lower extremity determined no significant arthritic abnormality or structural damage. Previous diagnosis included hip impingement syndrome. Over the past year, the patient was treated with ultrasound, myofascial release, joint manipulation, therapeutic exercise, and stretching from chiropractic and physical therapy without success.

Initial Evaluation

Pelvic-femoral, trunk, and scapular-thoracic objective measures:

	Right	Left
Hip Add (mod. Ober)	-	+
Hip Ext (mod. Thomas)	-	+
Hip ER	40°	50°
Hip IR	30°	40°
Trunk Rotation	Limited	Full
Shoulder IR	40°	90°

RW's pelvic position is consistent with an anteriorly tilted and forwardly rotated left hemi-pelvis, with associated sacral and spinal orientation to the right.¹ In this pattern of pelvic-femoral asymmetry the right acetabulum is internally rotated on the right femur, causing an impingement of the right femoral head. The associated symptoms that the patient describes result from the increased compression of the femoral head on the acetabulum during loading and a subsequently strained right adductor muscle. Limitations in right hip ROM are evident by objective goniometric measures detailed above.

This alteration in pelvic-femoral position will also manifest with compensatory changes throughout the entire body. The right sacral-spinal orientation requires a counter rotation through the thorax to the left in order to reorient a centric relation of the body to a perceived straight alignment. This positional adaptation becomes the means by which the patient learns to face forward and perform ADLs. The result however is an asymmetrical rib cage with the left half positioned in state of external rotation and the right half in internal rotation when the thoracic spine counter-rotates toward the left.² The altered rib cage position affects the convex-concave relationship of the scapula on the thorax contributing to the loss of shoulder internal rotation objectively measured above. For optimal success of program, this compensatory kinetic chain asymmetry must be addressed.

Intervention

- 10 Postural Restoration physical therapy sessions

Treatment focused on restoration of proper pelvic alignment by shifting it back to the left and restoration of proper rib cage alignment by rotating it back to the right. A key component to her therapy was to decrease right adductor muscle hyperactivity and fascial restrictions through the thorax that were affecting gait and weight shifting capabilities. When the patient began to balance the strength of the left adductor to the right, there became less impingement on the right femur and decreased pain. Also, it was necessary for the patient to develop good, functional strength of the right gluteus maximus and medius as rotators of the femur in the acetabulum to prevent the compensatory muscle overuse of the right adductor causing pain.

Outcomes

Following the scheduled Postural Restoration therapy sessions, the patient reported:

- 100% improvement in all of her signs and symptoms
- Able to return to work and recreational activity with no symptoms during or after the activity.

Final Evaluation

Pelvic-femoral, trunk and scapular-thoracic objective measures:

	Right	Left
Hip Add (mod. Ober)	-	-
Hip Ext (mod. Thomas)	-	-
Hip ER	55°	55°
Hip IR	45°	45°
Trunk Rotation	Full	Full
Shoulder IR	90°	90°

Discussion

RW's objective measures and asymmetrical pelvic and thorax position indicated a need to begin Kinetic Physical Therapy Institute's specialized biomechanical Postural Restoration program. The patient was provided home exercises based specifically on the identified objective measures to address these pelvic-femoral and scapular-thoracic asymmetries and acquired positional adaptations. By addressing the postural asymmetries across her pelvis, we restored proper biomechanical position and relationships between the femur and acetabulum. In sum, the right groin pain and impingement was the result of her right adductor in a shortened position with increased compression forces of the femur loading on the acetabulum. The right adductor attempted to compensate as a hip external rotator of the femur when the rotated acetabulum positioned the right gluteus maximus at mechanical disadvantage. Full humeral rotation was attained once the rib cage was properly positioned under the scapula correctly and required no stretching of the posterior capsule with the classic "sleeper stretch." Correcting the rib cage asymmetry will now allow for optimal gait mechanics and proper weight transfer to prevent excessive loading on the right anterior hip capsule causing impingement pain. This complete kinetic chain restorative process was necessary to allow the patient full return to previous activity level without right hip, groin, or knee pain.

After failing several treatment options over the previous year, it is significant to note RW's successful outcome with Postural Restoration. The examination of the complete biomechanical kinetic chain in this case report is critical, as it demonstrates the causative factor in a patient's pain is often multi-factorial and related to areas other than the site of pain. Her right hip pain did not resolve by simply addressing the right hip in previous chiropractic and physical therapy. It required a total body restoration with knowledge of the mechanical and fascial relationships that were contributing to her chronic hip pain.

This case report confirms that Kinetic Physical Therapy Institute in Woodbury, MN is a successful treatment alternative for patients struggling with a variety of unresolved stress and chronic pain issues.

References

1. Hruska, RJ. Myokinematic Restoration – An integrated approach to the treatment of patterned lumbopelvic pathomechanics, Postural Restoration Institute, Lincoln, Nebraska, 2007.
2. Hruska, RJ. Postural Respiration – An integrated approach to the treatment of patterned thoraco-abdominal pathomechanics, Postural Restoration Institute, Lincoln, Nebraska, 2008.

