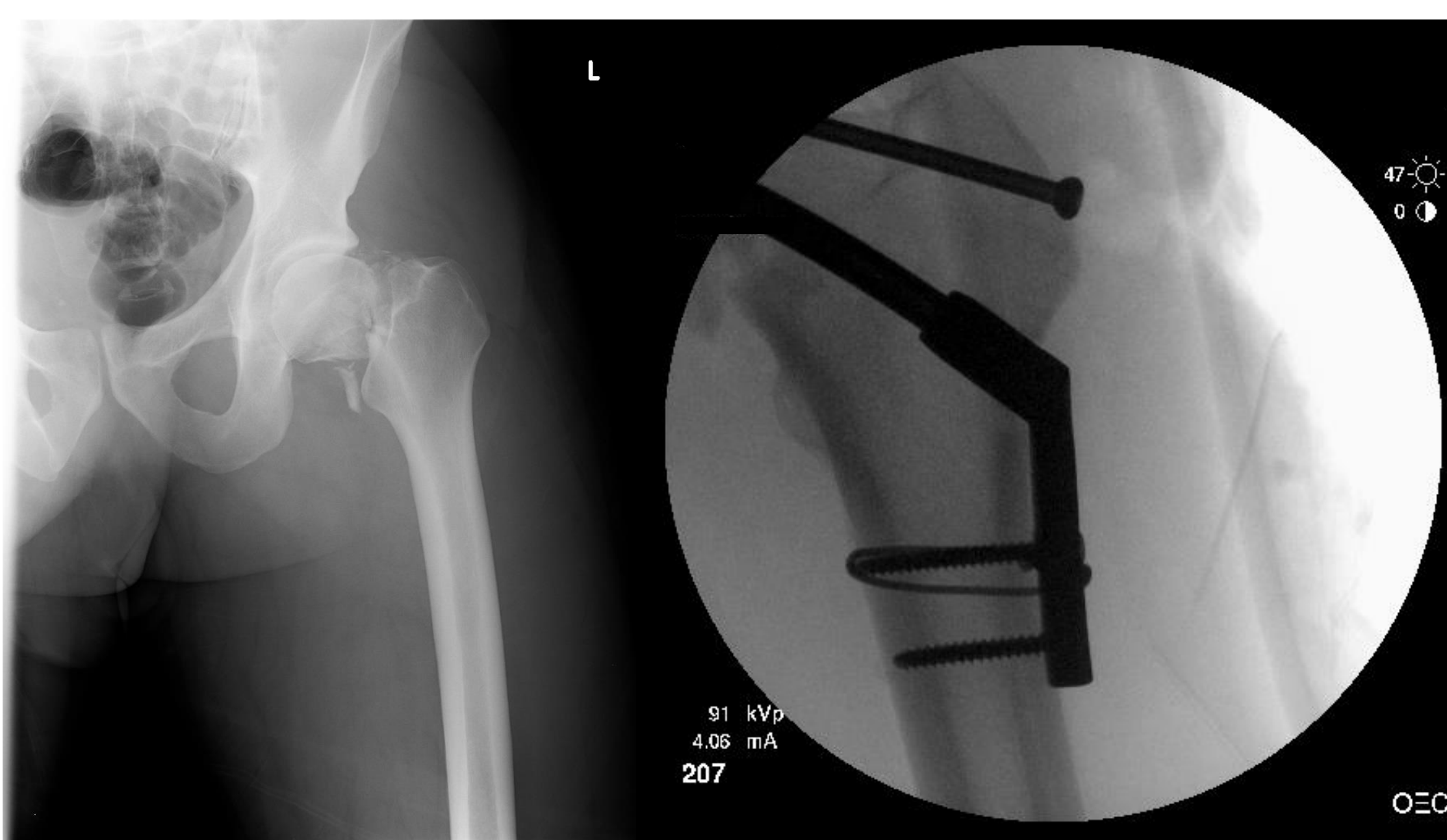
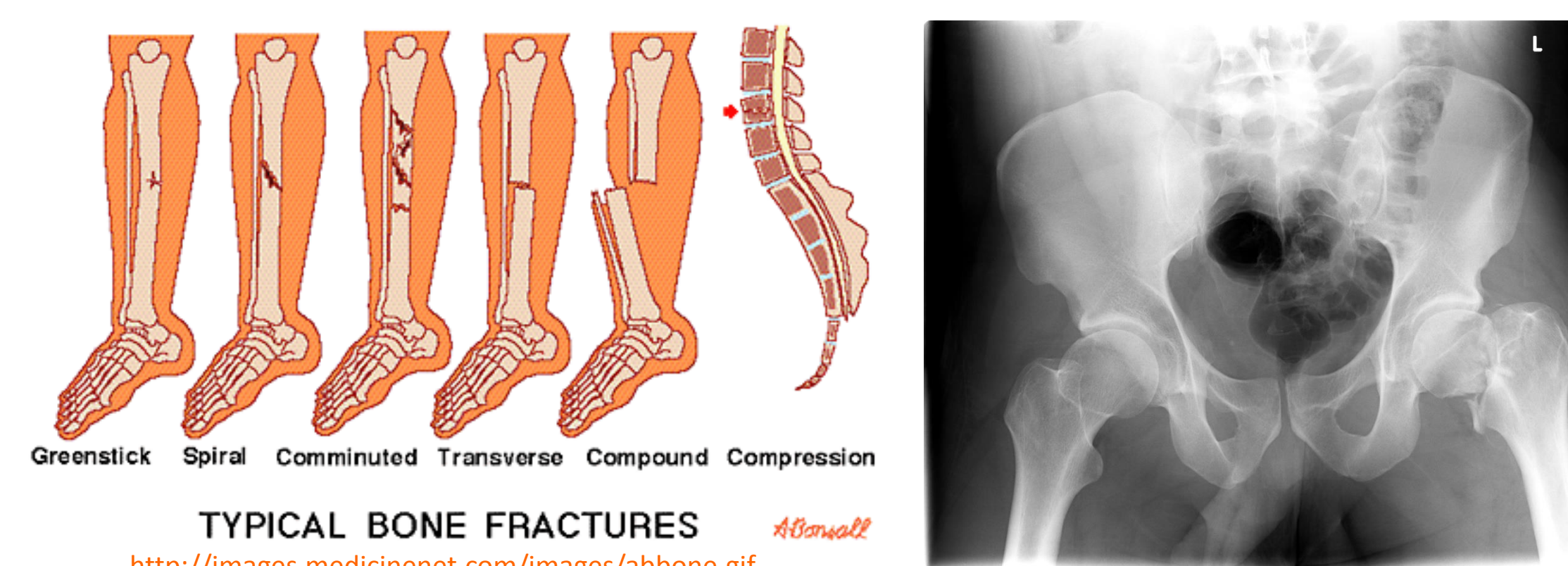


Physical Therapy Outcomes in a 28 Year Old Male With a Femoral Neck Fracture Using Aquatic and Land-Based Therapeutic Exercise: A Case Study

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Background

- Hip fractures occur in approximately 341,000 persons each year in the U.S.
- Hip fractures at a young age are uncommon and are usually the result of a high-velocity injury or, rarely, secondary to bone pathology.
- Morbidity associated with an inability to return to a pre-fracture level of mobility often results in a loss of independence, reduction in quality of life, and depression.
- There is a lack of available literature on the physical therapy management of hip fractures in the younger patient population.



Purpose

- The purpose of this case report was to investigate the physical therapy management of a 28 year old male who had sustained a femoral neck fracture.
- A combined approach of aquatic and land based therapeutic exercise was used.

Case Description

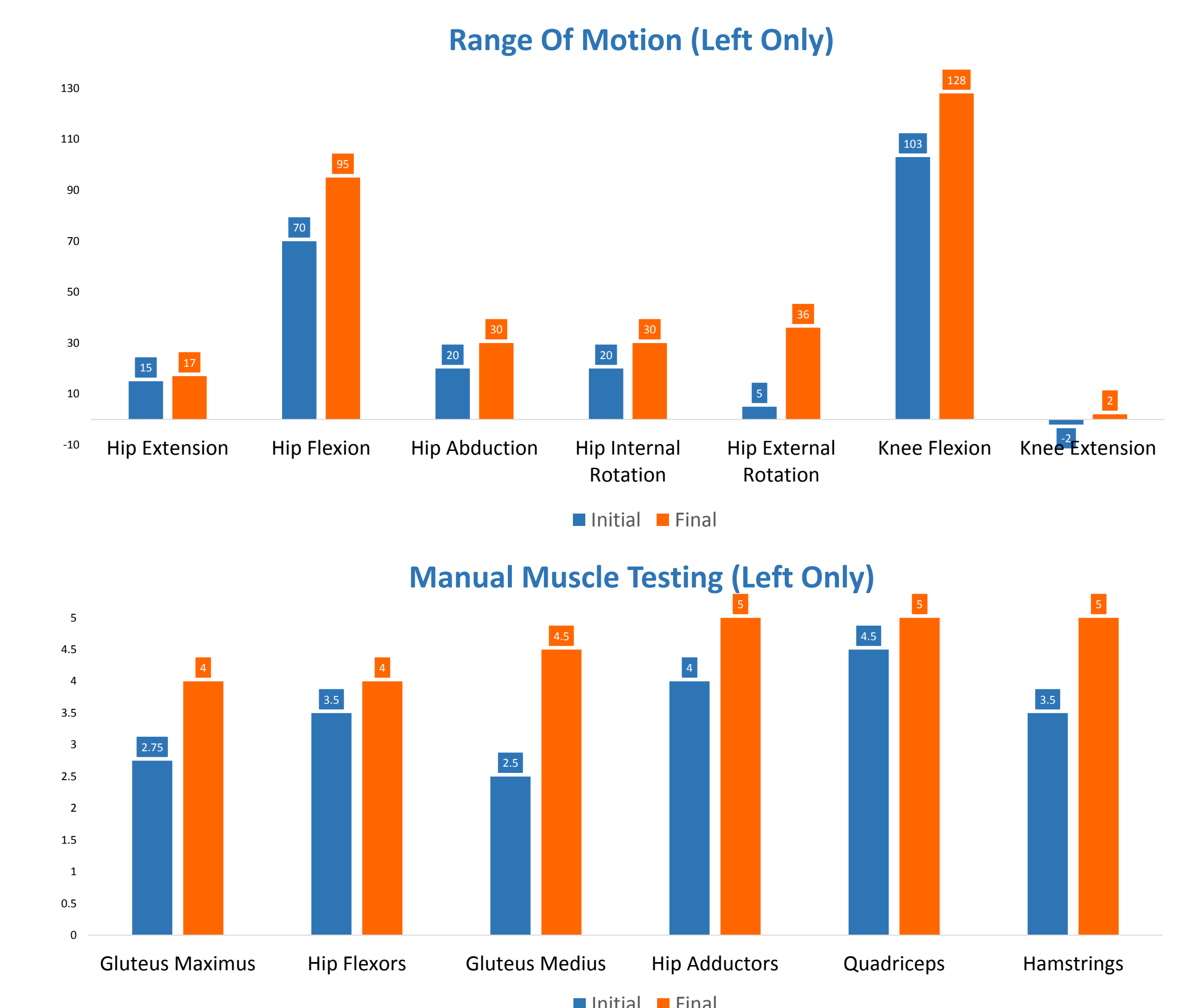
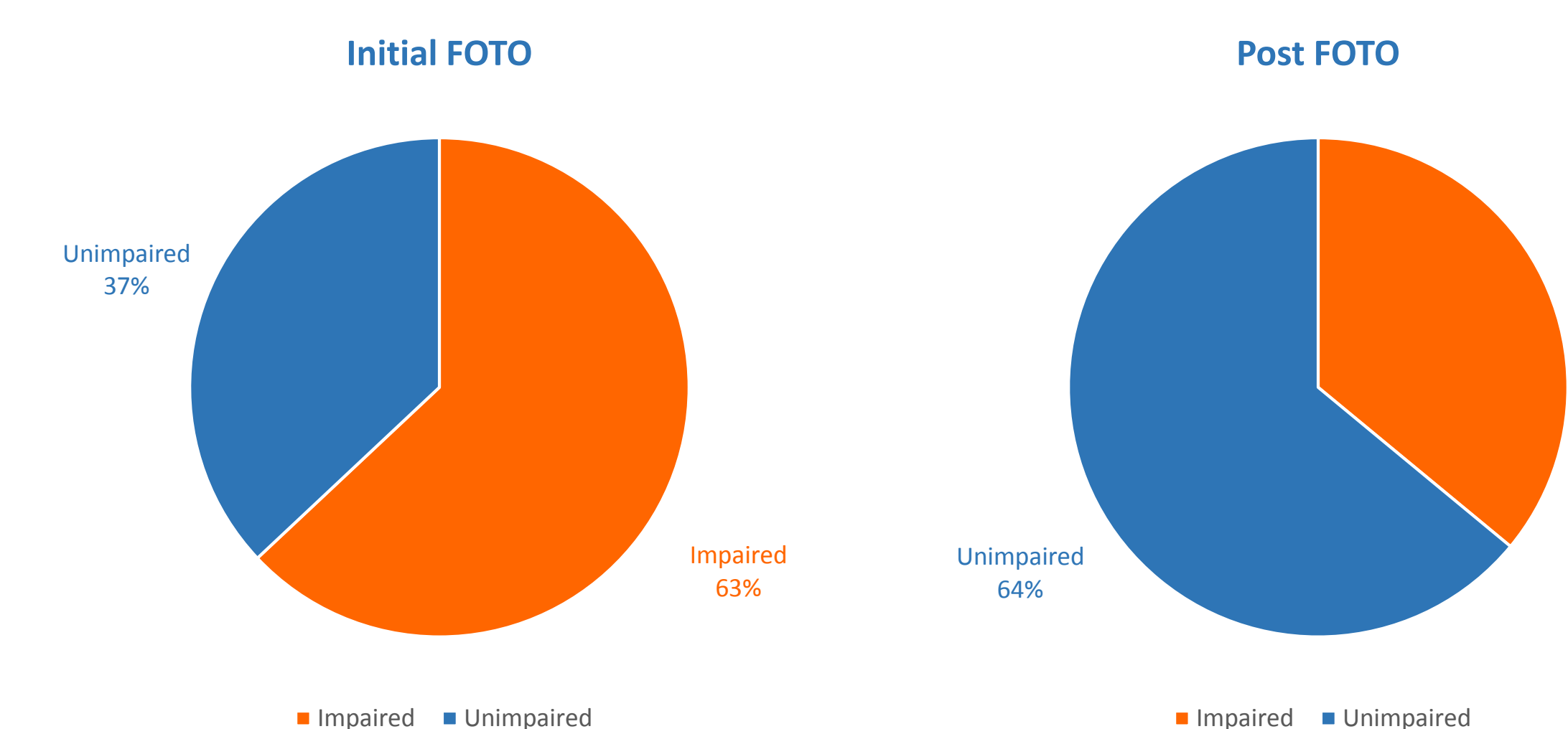
- The patient was a 28 year old male working in a manual labor occupation.
- Patient suffered a highly comminuted left femoral neck fracture which was surgically managed with an ORIF procedure.
- Decreased left lower extremity strength and range of motion.
- Procedural interventions included both aquatic and land based therapeutic exercise and home exercise programs.
- Treatments were conducted in an outpatient orthopedic clinic.

Examination

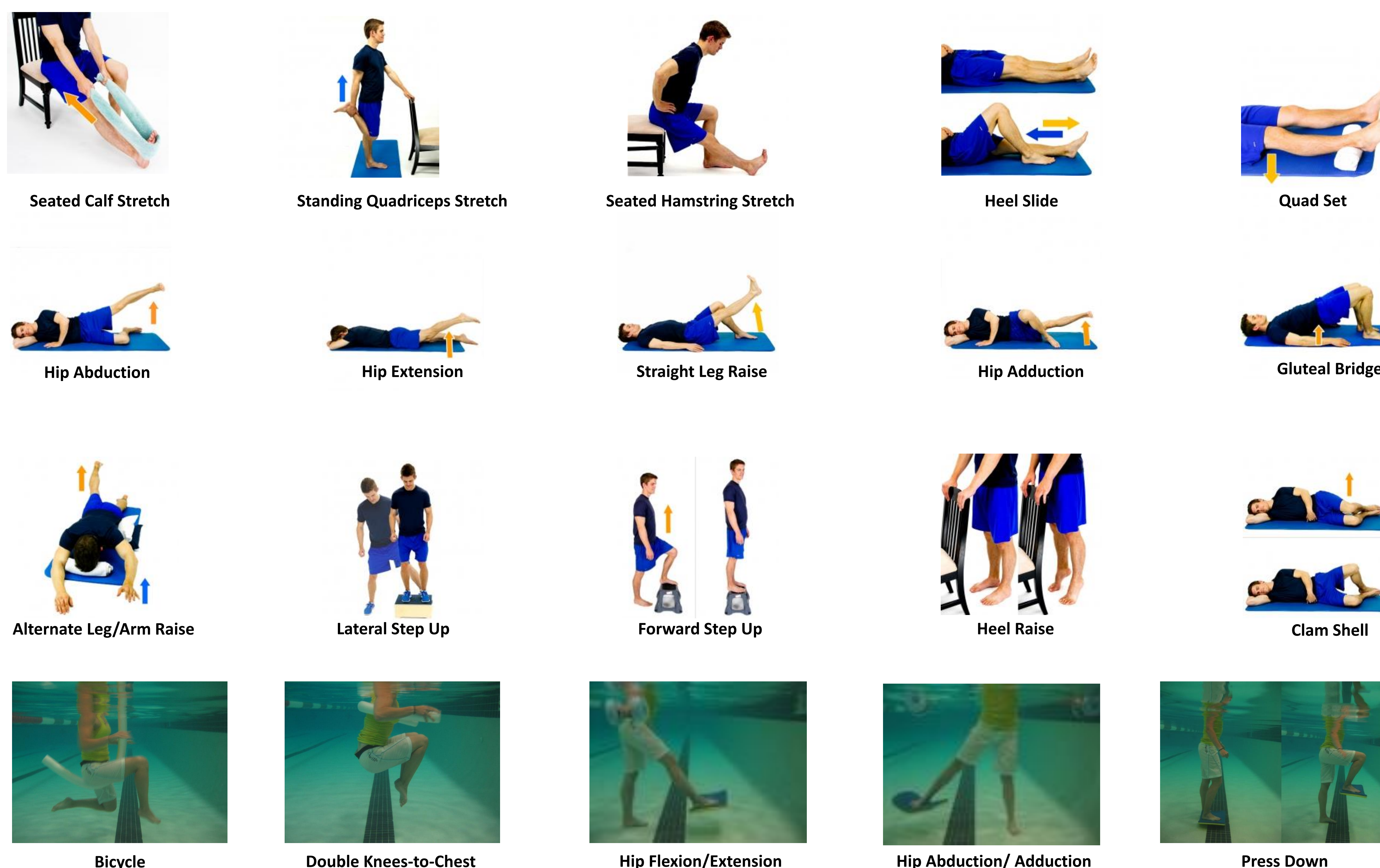
- Decreased left hip and knee range of motion.
- Impaired lower extremity strength.
- ¾" leg length discrepancy, left leg longer.
- Touch-down weight bearing restriction.
- Functional mobility assessments not performed at initial evaluation due to weight bearing restriction.

Outcomes

Following 7 treatment sessions (4 land, 3 aquatic) spanning a 6 week period, the following outcomes were observed:



Sample Interventions



*All intervention images sourced from Hep2go.com

Discussion

A combined land & aquatic intervention program may be a viable strategy for patients whom have suffered a femoral neck fracture. This case report revealed increased strength, ROM and decreased disability as measured by the FOTO outcome measure. Due to rapid increases in patient function, weight bearing restrictions were lifted 4 weeks early. Further studies should investigate this therapy on patients with weight bearing restrictions.

Acknowledgements

The author acknowledges Kirsten Buchanan PhD, PT, ATC for assistance with case report conceptualization and Heather Flannigan Nelson MPT for assistance with patient management.