

# Return to Golf Post Subscapularis Repair: Consideration of Regional Interdependence

## INTRODUCTION

Isolated subscapularis tears are uncommon in relation to the frequency of rotator cuff (RTC) pathology. However, in specific populations such as golfers, the subscapularis is the second most torn RTC muscle.

### Purpose

The purpose of this case is to encourage clinicians to consider regional interdependence between a subscapularis tear/repair and a history of low back pain in a recreational golfer. Standard rehabilitation specific to the shoulder post subscapularis repair achieved full functional use of the upper extremity, but limitations persisted specific to golf. This case report highlights the importance of assessing golf mechanics with regional interdependence in mind in order to assist a patient in returning to functional golf performance.

## METHODS

### The Patient

- 42 year-old male recreational golfer presented post subscapularis RTC repair
- Significant history of low back pain since age 16; laminectomy L4-5, L5-S1
- Retired military; plays golf 18-36 holes at least 3 times/week

### Plan of Care

- Weeks 0-20 of therapy – traditional post RTC rehabilitation
- Patient achieved full functional AROM, pain free daily function, strength 4+-5/5
- Continued impairments specific to golf
- Left lateral shoulder pain with back swing and a pinch like pain at end range shoulder flexion overhead
- Week 21+ of therapy – Golf analysis led to plan of care shift to consider regional interdependence between low back impairments and persistent shoulder pain

## INTERVENTIONS/RESULTS

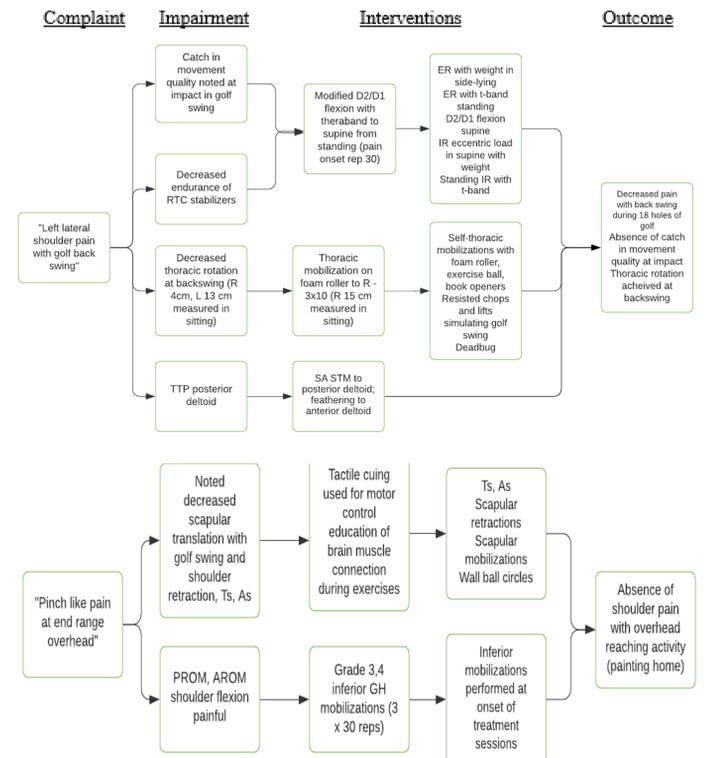


FOTO scores – total 50 point increase (stage 2 to stage 4)

Shoulder pain absent during 18 holes of golf at discharge

Improved ROM, flexibility, and stability in trunk and lead shoulder (L shoulder) resulting in improved quality of movement throughout golf swing

## CONCLUSION

The golf analysis pinpointed additional impairments in the trunk and low back that when addressed in conjunction with shoulder rehabilitation mitigated the patient's shoulder pain complaints in clinic and during 18 holes of golf. Consideration of the entire kinematic chain involved in the golf swing was necessary for this patient to return to full functional performance with sport and recreational activity. It is not possible to determine if the patient's long history of low back pain and frequent participation in golf was directly associated with degenerative changes in the rotator cuff resulting in the injury. However, it is apparent that decreased mobility in the lumbar spine, thoracic spine, and pelvis placed increased strain in the shoulder post-surgical repair during golf. Addressing the impairments in the adjacent body regions resulted in a decrease in dysfunction and pain in the shoulder.

## CLINICAL RELEVANCE

- It is beneficial to always assess body mechanics for a sport, recreation, or frequented position in order to broaden contributing factors especially with persistent impairments
- Assessment and treatment of impairments in adjacent regions along the kinematic chain improved persistent shoulder pain
- Consider regional interdependence between low back and shoulder pathology in recreational golf athletes in prevention and rehabilitation settings

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