Abstract

The purpose of this exploration case series is to review literature regarding the effects of prehabilitation on shoulder labrum reconstruction, to resolve whether it is an effective method of treatment that could become a more common practice.

Introduction

While suggested as effective in patients anticipating orthopedic surgeries, recent studies have proven its benefits in cancer patients, preparing them physically and emotionally for surgery and improving treatments. It has also produced positive results for patients who are to undergo procedures for joint, cardiovascular, lung, and colorectal conditions (K. Pechman, 2014).

To conclude this review, there are implications for further research on the effects and benefits of prehabilitation on specific surgical populations. Because rehabilitation relies on an evidence based practice, it is necessary to provide evidence supporting claims of prehabilitation on more surgical populations to avoid this litigation risks. In this case, intercostal/intercostals. Further research may be conducted on how starting the rehabilitation process early can improve overall recovery and maintain strength, stability, and range of motion, and to provide benefit for patients post-op.

Case Report

Patient: NAIA division football player, 22 years old, defensive lineman. Tore both anterior and posterior aspects of the glenoid labrum. The athlete has no previous history of shoulder injury.

Mechanism of Injury: Labral tears of the shoulder typically occur with an awkward load or shearing force, along with rotation of the joint, and/or subluxation/dislocation of the shoulder. In this case, the athlete was in the middle of a tackle when a number of players began to ‘dogpile’. The athlete fell with his right arm placed in 180 degrees abduction, while others began to fall on top of him.

Clinical Examination: The athlete finished the game and came in for an evaluation the next day. Subjective evaluation revealed pain in the both anterior and posterior aspects, as well as an "achy" pain "inside" shoulder shoulder. Objective evaluation revealed tenderness to palpation on the anterior and posterior joint lines. There was no palpable or observable signs of inflammation. The athlete had pain limited range of motion during manual muscle testing. He experienced pain limited shoulder abduction and external rotation, in both the sagittal and horizontal plane. Positive special tests included Yurgeon’s, Drop arm test, Empty can, and the Labral grind test.

Radiographic Findings: The patient was referred to a physician for imaging. MRI imaging came back positive, revealing a tear at the anterior joint line. X-ray did not reveal any bony defects.

Clinical Examination: Upon re-evaluation, the athlete has minimal swelling, no observable or palpable deformity, discoloration, or other findings. Patient continues to report intermittent pain in anterior and posterior aspects of his shoulder. Manual muscle testing concludes normal strength in shoulder flexion, abduction, internal and external rotation at the glenohumeral joint, normal pain limited AROM. All previously executed special tests remain positive.

Discussion and Summary

Labral tears of the shoulder are quite common in high contact sports such as football. They can either be severe injuries, resulting in slight to severe loss of function, and some may not even need surgery and may do just fine with conservative treatment. Research on prehabilitation has suggested positive outcomes in reducing recovery time after surgery. However, most research concludes that not enough information and data have been collected to fully back support the claims that prehabilitation definitely decreases recovery time after surgery.

References


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Effects of Prehabilitation on Recovery in Post-operative Shoulder Labrum Repair