ABSTRACT

**Background and Purpose:** Shoulder instability, a common issue among athletes who engage in contact sports, may lead to recurrent subluxations, or partial dislocations of the shoulder. Young athletic patients generally respond poorly to the nonsurgical treatments for shoulder instability that are commonly utilized. The purpose of this case report is to describe the effects of the treatment guided by the Mulligan Concept (MC) coupled with reflex neuromuscular stabilization (RNS) also known as reactive neuromuscular training (RNT), on an adolescent football player with glenohumeral joint (GHJ) instability who sustained a traumatic anterior subluxation.

**Case Description:** The MC shoulder Mobilization with Movement (MWM) and RNS were applied in the treatment of an anterior shoulder subluxation injury sustained by a competitive adolescent football player. The Numeric Pain Rating Scale (NPRS), the Disability in the Physically Active (DPA) scale, the Patient specific Functional Scale (PSFS) and the Shoulder Pain and Disability Index (SPADI), were administered in order to identify patient-reported outcomes.

**Outcomes:** The shoulder MWM and RNS provided immediate relief of all of the patient’s pain and increased ROM after the first treatment. The use of the coupled treatments resulted in a resolution of pain, an increase in range of motion (ROM) and improvement in perceived stability. A minimal clinically important difference (MCID) was reported on the NPRS and minimal detectable changes (MDC) were reported on the NRS and PSFS, after the first treatment. Equally important, MCIDs were reported on the DPA scale and SPADI scale over the course of treatment.

**Discussion:** In this case report, the MC shoulder MWM, coupled with RNS, was an effective treatment for this patient and provided a short time to resolution (6 treatments; 19 days) compared to other descriptions of recovery in the literature. Clinicians treating patients who display anterior shoulder instability can consider this as a viable treatment option. Even though current literature indicates that surgery is an optimal treatment for reducing recurrent subluxations, in young athletes who participate in contact sports, the effects of surgery are substantial. Therefore, the consideration of the presented option for non-operative treatment is important.

**Level of Evidence:** 4-Case Report

**Key words:** Instability, Mobilization with Movement, Muscle Patterns, Nonsurgical Treatment