

## **Abstract**

**TITLE:** Dosed Exercise using Medical Exercise Therapy Principles Following Shoulder Subluxation

**STUDY DESIGN:** A Case Report

**BACKGROUND:** Shoulder subluxation is characterized by pain and incapacitation. Tissue healing is a prerequisite for strength progression and return to work or sport. Shoulder tightness is a common risk. Dosed medical exercise therapy (MET) principles are a viable approach to recovery.

**CASE DESCRIPTION:** A 14-year-old, otherwise healthy male high school football player sustained a L shoulder subluxation after landing on flexed, outstretched arms. He reports pulling the shoulder “back into place”, reported to the emergency department for x-rays and a sling. He consulted his physician who referred to physical therapy. He was evaluated and started on a program using dosed MET principles to increase circulation, stimulate tissue healing, and prepare for strength progression. The patient was seen on a 2 time per week basis for 14 sessions progressing through the inflammatory and fibroblastic healing stages, and prepared for return to swimming.

**OUTCOMES:** The patient progressed 2 weeks of MET reducing his QuickDASH score from 61% to 40%. Pain and QuickDASH scores reduced to 0-2/10 and 14% at 4 weeks, and 0-1/10 and 2% at 7 weeks. MET dosing progressed to strength/endurance levels and overhead work was added in weeks 4 through 7. The patient progressed to the high school training room under the direction of the athletic trainer and discharged from skilled physical therapy with recommendations for functional progression to enhance swimming.

**DISCUSSION:** I described the management of a 14-year old male high school athlete with subacute R shoulder subluxation, who responded well to dosed MET principles through the inflammatory and fibroblastic healing stages. Research including random assignment to treatment groups would be beneficial.