

Case Report | Published: 13 May 2019

Autologous, micro-fragmented adipose tissue as a treatment for chronic shoulder pain in a wheelchair using individual with spinal cord injury: a case report

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Abstract

Introduction

Shoulder pain is common in persons with chronic spinal cord injury (SCI), with a prevalence reported as high as 70%. Current treatment of shoulder pain includes conservative measures such as physical therapy, pain medications, patient education, injections, and assistive devices. When conservative treatments fail, shoulder surgery is often the next option. Unfortunately, outcomes after shoulder surgery in persons with SCI are limited and conflicting.

Case presentation

This is a case of a 54-year-old right-handed male with T10 complete SCI (duration of injury = 10 years) who had a complaint of right-sided shoulder pain for 3 years. The individual used a manual wheelchair as his primary means of mobility and was an avid weight-lifter. Physical examination and MRI demonstrated a rotator cuff tear and degenerative changes of the acromioclavicular joint. He was previously managed conservatively with physical therapy and intermittent corticosteroid injections but failed to improve. He was enrolled in an IRB approved study and underwent an ultrasound-guided injection with autologous, micro-fragmented adipose tissue (MFAT) and ultimately received improvements in pain and function that were maintained a year after treatment.

Discussion

To our knowledge, this is the first reported case of treatment of chronic refractory shoulder pain in a person with SCI using MFAT. Complete relief from pain was maintained at the 1-year follow-up. Injection of MFAT under ultrasound guidance is an effective and promising treatment for chronic refractory shoulder pain in upper limb-dependent persons with SCI and warrants further research.



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Conflict of interest

Gerard A. Malanga is a consultant for Lipogems®. The remaining authors declare that they have no conflict of interest.

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