ABSTRACT

Background and Purpose: The etiology of Chronic Exertional Compartment Syndrome (CECS) is still unclear. The most commonly accepted theory suggests that it is a transient but debilitating process where there is an abnormally increased intracompartmental pressure during exercise/exertion due to non-compliant expansion of the osteofascial tissues. This most commonly occurs in the lower leg. Surgical intervention is often performed for symptom relief. However, there has been limited scientifically-based publication on post-surgical rehabilitation, especially with regard to return to function in the military population. The purpose of this case report is to demonstrate the utilization of a recommended post-operative protocol in a Special Forces Soldier.

Case Description: The subject presented as a 25-year-old US Army Special Forces Soldier, who failed 8 weeks of conservative management for the diagnosis of CECS and subsequently underwent bilateral lower leg fasciotomies of the anterior and lateral compartments.

Outcomes: Following recommended protocol guidelines he was progressed rapidly and within three months deployed without restriction or complications in a demanding combat zone.

Discussion: This case report illustrates that following clearly defined, scientifically-based rehabilitation guidelines helped in addressing all of the involved structures and musculoskeletal dysfunctions that presented following the surgical intervention for CECS in a unique subject.

Key Words: Chronic exertional compartment syndrome, special forces soldier, surgical

Level of evidence: 5

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