

Physical Therapy Management of a Patient with Lumbar Spine and Psoas Sarcoidosis: A Case Report

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ABSTRACT

Background and Purpose: Sarcoidosis is a rare inflammatory condition characterized by granuloma formation throughout the body. Symptoms vary widely depending on organ system involvement which makes diagnosis and treatment of the condition difficult. There is no typical presentation, but many patients report fatigue as a result of the diagnosis. Non-organ involvement affects less than 5% of patients and there is sparse evidence to guide rehabilitation outside of pharmacologic treatment. The purpose of this case report is to describe physical therapy management of a patient with impairments secondary to Sarcoidosis with granulomas throughout the musculoskeletal system.

Case Description: The patient was a 54-year-old male diagnosed with sarcoidosis in the lumbar spine and bilateral psoas muscles who presented to a private outpatient orthopedic physical therapy clinic. His symptoms date back approximately one year before the diagnosis was made after failed conservative medical management. Physical therapy care was delayed as result of the COVID-19 pandemic. At the time the patient complained primarily of lower back/bilateral hip pain, decreased strength, range of motion and flexibility in bilateral lower extremities, and decreased sensation at the ankle. These impairments impacted his sleep, stair negotiation, sitting, recreational activities such as running, and activities of daily living. Interventions primarily consisted of stretching, manual therapy, deep tissue massage, Instrument Assisted Soft Tissue Mobilization, progressive functional exercises, and patient education regarding symptom management strategies, as well as a comprehensive home exercise program. In addition, Medical Exercise Technique was also introduced early in the plan of care.

Outcomes: Upon discharge, all short and long-term goals were met. The patient reported minimal continued activity limitations, aside from prolonged sitting, which the patient reported mild stiffness after 1 hour. The Oswestry Disability Index and Numeric Pain Rating Scale were used during the initial examination and were repeated upon discharge. The patient exceeded the MCID on both self-report outcomes measures, indicating that there was a clinically significant change in pain levels and low-back related disability. Strength and range of motion improved throughout both lower extremities, with only minimal improvements in flexibility since the start of care.

Discussion: This case report serves to fill a gap in current research. Currently, the majority of research focuses on management of pulmonary Sarcoidosis, especially in management of fatigue. There is a small prevalence of Sarcoidosis seen in the musculoskeletal system, and very little research on how to treat the impairments that result from the diagnosis. This case serves as an example of atypical symptoms and a possible course of treatment. The patient's symptoms responded well to addressing impairments and activity limitations, with a focus on

decreasing pain before moving to more functional movements. This began by utilizing Medical Exercise Technique, which allowed the patient to see early benefits in range of motion with moderate pain reduction. Sarcoidosis often goes undiagnosed due to the variability in presentation, but once identified physical therapy intervention can help increase quality of life.

Key Words: Physical therapy, sarcoidosis, musculoskeletal, non-organ, Medical Exercise Technique