

CASE STUDY

DIFFERENTIAL DIAGNOSIS AND INTERVENTION FOR COCCIDIODAL SPONDYLITIS

PATIENT INTERVENTION: A 27-year-old warehouse worker presented with sudden onset of back pain following a bending, lifting, and twisting motion. Initial diagnosis by physicians based on x-ray, MRI, and blood work results was L1-L2 end plate fracture. Patient was braced for 8 weeks followed by physical therapy (PT) intervention that resulted in initial functional improvement, but then pain worsened as time and activity progressed. PT referred patient back to physician after noting “red flags” and he was diagnosed with a progressive L1-L2 *Coccidioides immitis* spinal infection. Surgical debridement and spinal fusion combined with anti-fungal medication followed by spine stabilization and work conditioning PT intervention resulted in a successful outcome and return to work.

INSIGHTS: This case report illustrates how a rare, potentially fatal spinal infection became apparent during PT intervention for what was thought to be work-related mechanical low back pain. Continuous reassessment, awareness of red flags, and open communication with referring physicians are important PT skills for handling unusual or serious symptoms that may arise during intervention. Furthermore, with the increasing emphasis on autonomous practice, PTs need to be able to use differential diagnostic skills to identify patients with underlying medical conditions that might present as musculoskeletal problems and refer them on to the appropriate medical provider.

DESCRIPTIONS: Poster includes flow chart of intervention, MRI scans showing disease progression, chart of red flags for back pain, and an overview of coccidiomycosis, a potentially deadly fungus infection that can be found in dry regions of the US. This disease is difficult to diagnosis and is more prevalent in those with a compromised immune system. When bone and/or joints are infected, it may be mistaken for a mechanical musculoskeletal problem.