ABSTRACT

Background/Purpose: The McKenzie Method of mechanical diagnosis and therapy (MDT) is supported in the literature as a valid and reliable approach to the management of spine injuries. It can also be applied to the peripheral joints, but has not been explored through research to the same extent. This method sub-classes an injury based on tissue response to mechanical loading and repeated motion testing, with directional preferences identified in the exam used to guide treatment. The purpose of this case report is to demonstrate the assessment, intervention, and clinical outcomes of a subject classified as having a shoulder derangement syndrome using MDT methodology.

Case Description: The subject was a 52-year-old female with a four-week history of insidious onset left shoulder pain, referred to physical therapy with a medical diagnosis of adhesive capsulitis. She presented with pain (4-7/10 on the visual analog scale [VAS]) and decreased shoulder range of motion that limited her activities of daily living and work capabilities (Upper Extremity Functional Index (UEFI) score: 55/80). Active and passive ranges of motion (A/PROM) were limited in all planes. Repeated motion testing was performed, with an immediate reduction in pain and increased shoulder motion in all planes following repeated shoulder extension. As a result, her MDT classification was determined to be derangement syndrome. Treatment involved specific exercises, primarily repeated motions, identified as symptom alleviating during the evaluation process.

Outcomes: The subject demonstrated significant improvements in the UEFI (66/80), VAS (0-2/10), and ROM within six visits over eight weeks. At the conclusion of treatment, A/PROM was observed to be equal to the R shoulder without pain.

Discussion: This subject demonstrated improved symptoms and functional abilities following evaluation and treatment using MDT methodology. While a cause-effect relationship cannot be determined with a single case, MDT methodology may be a useful approach to the examination, and potentially management, of patients with shoulder pain. This method offers a patient specific approach to treating the shoulder, particularly when the pathoanatomic structure affected is unclear.

Level of Evidence: 4

Keywords: Adhesive capsulitis, McKenzie, Mechanical Diagnosis and Treatment