LETTER TO THE EDITOR-IN-CHIEF


REGARDING THE COMPLEXITY OF LOW BACK PAIN

We would like to thank the authors of the article, “Unraveling the Complexity of Low Back Pain,” for highlighting some of the current issues and challenges with the diagnosis and management of low back pain (LBP), especially as it pertains to the focus on pathoanatomy and the correction of assumed “abnormalities.” We wholeheartedly agree that this problem can have wide-reaching consequences in terms of patient outcomes, as well as health care costs and utilization.

As the authors state in their title, unraveling the complexity of LBP has been the goal of researchers worldwide for the last few decades. However, the authors’ approach to “unraveling” was to dismiss many current approaches of dealing with LBP, without any effort to distinguish some that hold promise and are effective. Unfortunately, their approach doesn’t lead to clarification but complication, once again leaving clinicians with the impression that patients with LBP are to some extent a homogeneous group—homogeneous in the sense that the whole group of patients mainly requires cognitive behavioral therapy, pain education, and advice on healthy lifestyle behaviors. Although there is no doubt that these interventions are tremendously valuable in the management of a subgroup of patients with LBP, exclusively focusing on them ignores the fact that even in the chronic LBP population, there is a proportion of patients who can treat themselves using simple loading strategies and minimal behavioral modifications.\(^{5,12,14}\)

We take issue with the use of the word derangement as a part of the list of “presumed biomechanical and structural abnormalities” and would like to clarify the meaning of this term and the implications of the classification in LBP management. The term derangement, when used by a clinician trained in the McKenzie Method of Mechanical Diagnosis and Therapy classification system, is clearly defined with specific operational characteristics.\(^{18}\) Though, originally, Robin McKenzie hypothesized derangement to be a clinical presentation best explained by the intervertebral disc model,\(^{18}\) the operational definition of derangement has evolved away from any relation to potential pathology. Derangement is now strictly defined as a clinical classification that meets certain criteria.\(^{18}\) The classification is clinically determined by analyzing the patient’s symptomatic and movement response to various loading strategies. An essential criterion is directional preference (DP). To state that a patient demonstrates DP, it must be shown that a movement in a certain direction or combination of directions, when repeated sufficiently or sustained, will rapidly lead to less pain and better function. As stated in an extensive array of literature, the classification of derangement can occur in any joint.\(^{13}\) This in itself contradicts any claim that it is pathology specific, as its occurrence has been reported in the knee,\(^{6,13}\) elbow,\(^{7}\) shoulder,\(^{2}\) wrist,\(^{3}\) temporomandibular joint,\(^{4}\) and, of course, the spine,\(^{5,13}\) all of which possess obviously different structural anatomy.

Along with less pain and improved function, a host of other positive outcomes have been identified. These include, but are not limited to, decreased fear avoidance,\(^{1,3,17}\) less psychosocial distress, less somatization, and less depressive symptoms,\(^{16}\) with pain self-efficacy being increased.\(^{9}\) It has been postulated that these positive psychosocial outcomes may be the result of altering the patient’s perceptions about pain and disability, assisting in differentiating between “hurt” and “harm” and better aligning expectations regarding pain.\(^{16}\)

Instead of burdening patients with pathoanatomical labels, the concept of derangement and DP demonstrates to them that the symptoms are changeable and that they are encouraged and empowered to treat themselves with exercise and adhere to postural advice, thus encompassing what the authors themselves identify as positive and desirable: “This enables the patient to become a partner in a therapeutic journey that aims to lower the threat of pain, develop active coping strategies to self-manage the disorder, and engage in value-based activities.”\(^{71}\)

Contrary to the statement in the article regarding the prediction of outcome, the Mechanical Diagnosis and Therapy classification of derangement, with its associated DP and (in the spine) centralization, has been shown in dozens of articles to have an excellent predictive ability with LBP. The ability to also identify noncentralizers allows clinicians to focus on alternative management strategies, such as cognitive behavioral therapy, to address potential psychosocial aspects. This is another factor that distinguishes this classification from other commonly measured and observed findings.

Perhaps the most compelling aspect and the finding that has the greatest implication is the identification of derangement as, not a rare phenomenon, but a very common one. In the spine, the prevalence has been reported to be as high as 74% in the acute population\(^{8}\) and 42% in the chronic population.\(^{9}\) In the shoulder, there are initial reports of 30% prevalence (unpublished data), and in the population with osteoarthrosis of the knee it has been reported in one study to be 40%.\(^{10}\) All of these patients have the ability to self-manage their musculoskeletal problem, with the potential implications for the individuals and health care utilization.

We agree and acknowledge that all patients present with, as the authors state, an interplay of physical, psychological,
social, lifestyle, comorbid health, and nonmodifiable factors. But, just as it is still important to screen for and identify any signs of serious pathology, a patient’s symptomatic and mechanical responses to loading strategies should be explored fully. This will identify the presence of DP/centralization and the classification of derangement, avoiding the necessity of pursuing more complex options. Denying the existence of these well-documented phenomena means missing the potential for empowering a large majority of patients and dealing efficiently with the physical and psychosocial barriers to recovery.

Richard Rosedale, PT, Dip MDT
London Health Sciences Centre
London, Ontario, Canada

Georg Supp, PT, Dip MDT
PULZ Physiotherapy
Freiburg, Germany

Kathy Hoyt, PT, Dip MDT
The McKenzie Institute USA
Syracuse, NY

Greg Lynch, PT, Dip MDT
InForm Physio
Silverstream, New Zealand

Helen Clare, PT, PhD, Dip MDT
McKenzie Institute International
Raumati Beach, New Zealand

All authors report personal fees as instructors with the McKenzie Institute International and/or serve on the McKenzie Institute’s International Education Committee. Dr Clare is the McKenzie Institute International Director of Education and Richard Rosedale is the Institute’s Reference Coordinator.

REFERENCES


