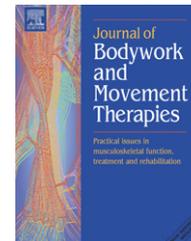




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BOOK REVIEW

Frank C, Lardner R, Page P. The assessment and treatment of muscular imbalance – The Janda Approach Hardback \$64, Human Kinetics, Champaign, IL USA, ISBN-13:9780736074001

Vladimir Janda, MD, DSc (1923–2002) influenced generations of practitioners spanning many disciplines. This evidence-based book is written by three physical therapists, all of whom worked with Janda. It emphasizes various assessment and treatment procedures based on the existence of muscle imbalance – the combination of abnormal muscle inhibition (“weakness”) and hypertonic muscles (tightness). This would make a useful addition to every clinician’s library – especially physical therapists, chiropractors, osteopaths and all those using hands-on therapies.

The book is divided into four parts:

- *The Scientific Basis of Muscle Imbalance* includes chapters on the structural and functional approaches to muscle imbalance, and the “pathomechanics” of pain.
- *Functional Evaluation of Muscle Imbalance* discusses posture, gait, muscle length testing and soft tissue assessment.
- *Treatment of Muscle Imbalance Syndromes* describes the restoration of muscle balance and sensorimotor training.
- *Clinical Syndromes* presents four common areas of musculoskeletal pain disorders: cervical, upper extremity, lumbar and lower extremity.

Like many pioneers, Janda’s terminology and ideas evolved apart from the traditional clinical sciences. The author’s state: “There are several schools of thought regarding muscle imbalance. Each approach uses a different paradigm as its basis. Vladimir Janda’s paradigm was based on his background as a neurologist and physiotherapist.”

The Janda Approach provides more than an introduction of his material for practitioners and students. In the preface the author’s state: “We wanted to write a text that both preserves and supports Janda’s teaching. This book is only a tool for everyday practitioners; it is not meant to address all chronic pain syndromes or even all muscle imbalance syndromes. Instead, we wanted to provide practical, relevant, and evidence-based information

arranged into a systematic approach that could be implemented immediately and used along with other clinical techniques.”

An important concept presented well is the interplay between injuries and muscle imbalance. Janda’s “muscle imbalance continuum” describes tissue damage, pain and altered gait as potential causes of imbalance, while emphasizing that the reverse can also exist.

The book’s wide range of topics associated with neuromuscular function is as impressive as the therapeutic options offered – from acupuncture and trigger point therapy to the works of Florence and Henry Kendall, and George Goodheart. All the topics are well researched with 40 pages of references.

Janda’s view of muscle imbalance is presented well – the combination of tight/short muscles and weak ones, mediated by the central nervous system with important stimuli from the peripheral nervous system (in particular, proprioception from joints). While the book references Sherrington, Janda often deviated in his approach by treating the tightness as the primary muscle problem rather than the weakness.

The book’s side-by-side comparison is made between Janda’s clinical approach to muscle imbalance and that of physical therapist Dr. Shirley Sahrmann. However, to help address the common debate among clinicians regarding which side of muscle imbalance is primary, it might have been useful to also present the different perspectives adopted by physical therapist Diane Damiano (Damiano et al., 1995; Wiley and Damiano, 1998) or George Goodheart DC (Walther, 2000; Goodheart, 1964) whose clinical work focused mainly on muscle weakness. The interpretation of Sherrington’s law of reciprocal inhibition appears to be the difference. *The Janda Approach* does recommend using muscle testing in certain cases, and suggests, at times, treating the weakness side of muscle imbalance.

The Janda Approach describes a full spectrum of muscle imbalance – from relatively common problems associated with aches and pains, including chronic low back syndrome, to the more serious mechanical distortions in brain and spinal cord injured patients. An important tenet is worded well by the authors: “[Janda] based his approach on his observations that patients with chronic low back pain exhibit the same patterns of muscle tightness and weakness that patients with upper motor neuron lesions such as cerebral palsy exhibit, albeit to a much smaller degree.”

Janda believed that 80% of patient's with low back pain could be shown to have minimal brain dysfunction.

In our symptom-oriented healthcare world, it was refreshing to read Janda's philosophy that the source of pain is rarely the cause. The book dedicates a chapter to this concept of interactions between the skeleton, muscles and nervous system, and the process of cause and effect. While the authors describe Janda's many clinical models, clinicians are well aware that patients typically deviate from these patterns, creating their own unique neuromuscular patterns.

Like many chapters, the one on posture, balance and gait is excellent. However, despite writing his first book on muscle testing, *The Janda Approach* describes only a few manual muscle tests, instead relying more on posture, gait, muscle length assessment and basic movement patterns to evaluate muscle imbalance.

Because Janda felt that manual therapy was not sufficient by itself to successfully treat the neuromuscular system, the authors discuss his *sensorimotor training* as an important aspect of patient care. Rather than traditional strength training, Janda used sensorimotor training to promote whole-body neuromuscular activity with emphasis on incorporating certain areas of the brain. These include gently increasing proprioception from the sole of the foot, deep cervical musculature and the sacroiliac joint, as well as vestibular balance training. These physical activities

help activate/retrain the motor system, improve postural control and optimize gait.

The last part of the book contains four chapters, each representing a common clinical syndrome by region: cervical, upper extremity, lumbar and lower extremity. Case histories offer good examples, but they don't replace an effective assessment and the potential for a wide variety of therapeutic options – many of these are offered by *The Janda Approach*.

Despite this reviewer's many years of study of Janda's work, this book provided much new information and ideas, largely because the authors present the material so well.

Dr. Maffetone can be reached through his website (www.PhilMaffetone.com): webmaster@PhilMaffetone.com

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Philip Maffetone