



BOOK REVIEW

Craig Liebenson, DC. *Rehabilitation of the Spine*, second ed. with DVD. Lippincott Williams & Wilkins, Philadelphia (2006) (972 pp., \$99.95, ISBN: 0-7817-2997-1).

Liebenson has taken 10 years to recraft and update his original excellent text, and his effort shows. This is a really wonderful look at the world of rehabilitation through the eyes of a gifted chiropractor, whose world view and methods reflect the best of functional integrated training, together with advanced manual medicine, much (but by no means all) of it from the Czech school.

When this reviewer first met Liebenson he was a student at Los Angeles College of Chiropractic with a thirst for knowledge that went beyond his chosen profession. A quarter of a century later, he has virtually single-handedly provided his profession (and all other physical medicine professions) with an integrated model and appropriate rehabilitation tools deriving from his subsequent search.

The influence of Lewit and the late Vladimir Janda permeate the book—with both of these giants participating as contributors. Their work, together with contributions from Cumpelik, Kolar, Pavlu, Veverkova and others, ensure that the Czech legacy is perpetuated.

The list of additional contributors to this second edition reads like a roll-call of the most gifted MD, PT and DC researchers, educators and clinicians currently available, including Hodges, McGill, McKenzie, Bogduk, Norris, Breen, Jull, Murphy, Triano and many (over 40) more.

After an opening *Overview* (four chapters), *Basic science* (two chapters) and *Assessment* (seven diagnostic, assessment and evaluation chapters and appendices) sections, the text divides into sections headed, *Acute Care Management (first 4 weeks)*, comprising 10 chapters and appendices—including one by Lewit and Kobesova on soft tissue manipulation; *Recovery Care Management (after 4 weeks)*, comprising 12 chapters; *Practical Application by Region*, comprising four chapters, including one by Lewit on *Managing common syndromes and finding the key link*; and finally there is a section on

Implementing the Functional Paradigm (five chapters and appendices).

The text is extremely well illustrated with photographs and line drawings, but its crowning glory is a DVD, containing as it does a wide range of well-presented assessment, rehabilitation and treatment protocols.

So are there any flaws in this valuable resource? A few, and these include:

1. In many areas of the book, where the use of isometric contractions preparatory to mobilization or stretching is discussed, the terms *post-isometric relaxation* (PIR) and *reciprocal inhibition* (RI) are used. Current research shows that these terms are no longer appropriate as the mechanisms they suggest do not produce the changes noted. Instead 'increased tolerance to stretch' is a term that describes what happens following isometric contractions, although it does not explain the mechanism. What seems certain though is that PIR and RI are not the mechanisms. (Magnusson et al., 1996; Fryer, 2006).
2. In Chapter 24, *yoga-based training for spinal stability*, despite some excellent material on the links between posture, breathing and spinal well-being it is possible to take issue with many of the breathing exercises and the recommended pelvic-floor exercises. While Chapter 17, *Rehabilitation of Breathing Pattern Disorders* is excellent, demonstrating a deep understanding of this complex issue (vital in spinal rehabilitation and core stability) anyone with an established breathing pattern disorder who attempts to follow the advice in Chapter 24 could become distressed and panicky, particularly if the somewhat complicated instructions are combined with yoga postures. Any practitioner who has attempted to guide someone with a faulty breathing pattern, towards normal function, knows that the essence of the process is simplicity.
3. Similarly the pelvic floor exercises in Chapter 24 make an assumption that problems of this area

are related to poor muscle tone, requiring exercises that contract and enhance tone. This is of course sometimes the case, but there is no sense in this chapter that the converse—high-tone pelvic muscles—may be the cause of pelvic distress, which is commonly the case. In those cases these exercises would not only not help but might create exacerbation of problems such as interstitial cystitis. (Lukban et al., 2001; Oyama et al., 2004).

4. A final quibble relates to the general paucity of discussion of myofascial trigger point involvement in spinal pain. There is, however, a fascinating discussion by Kolar in Chapter 23 (*Facilitation of agonist-antagonist Co-activation*) in which he attempts to explain chains of trigger points as representing 'frozen patterns' in the locomotor system relating to the synergy of stabilizing muscles (or their parts). This reviewer finds aspects of Kolar's perspective conceptually satisfying, however there is relatively little validation offered, and as in the yoga chapter (24), and unlike most of the rest of the book, this material falls short of providing adequate evidence for the views discussed.

These negative observations aside, this is a magnificent text, and will become (as the first edition did) a classic.

References

- Fryer, G., 2006. Muscle energy technique: efficacy and research. In: Chaitow, L. (Ed.), *Muscle Energy Technique*, third ed. Churchill Livingstone, Edinburgh.
- Lukban, J., Whitmore, K., Kellog-Spadt, S., et al., 2001. The effect of manual physical therapy in patients diagnosed with interstitial cystitis, high-tone pelvic floor dysfunction, and sacroiliac dysfunction. *Urology* 57 (6 Suppl. 1), 121–122.
- Magnusson, S.P., Simonsen, E.B., Aagaard, P., et al., 1996. Mechanical and physiological responses to stretching with and without pre-isometric contraction in human skeletal muscle. *Archives of Physical Medicine and Rehabilitation* 77, 373–377.
- Oyama, I., Rejba, A., Luknan, A., et al., 2004. Modified Thiele massage as therapeutic intervention for female patients with interstitial cystitis and high-tone pelvic floor dysfunction. *Urology* 64 (5), 862–865.

Leon Chaitow, ND, DO
*School of Integrated Health, University of
 Westminster, 115 New Cavendish Street, London
 W1M 8JS, UK*
E-mail address: leon@bodymove.demon.co.uk

Available online at www.sciencedirect.com

