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Osteopathic Manual Treatment and Ultrasound Therapy for Chronic Low Back Pain: An Illustration of Osteopathic Semantic Confusion

To the Editor:

A recent randomized controlled trial by Licciardone et al¹ reported on the beneficial effect of osteopathic manual treatment (OMT) in chronic low back pain. This keen study should excite the medical world's interest, not only for the results in favor of OMT but also for some existential—with regard to OMT—philosophical considerations that it raises. After all, what is OMT? It is striking that in this study¹ the abbreviation *OMT* is used for “osteopathic *manual* treatment,” differing from the usual term “osteopathic *manipulative* treatment.”³ We would like to point out that this seemingly small change re-

flects a larger identity problem peculiar to osteopathic medicine.

In our search for a description of OMT as studied in interventional research and as pooled in systematic reviews,^{2,3} we noticed that besides spinal manipulation, OMT can cover various sets of techniques that are widely unknown in the health care world: soft tissue techniques, Strain-Counterstrain, muscle energy techniques, cranial osteopathic manipulative treatment, etc. Despite this global lack of knowledge of OMT, Licciardone et al¹ did not clearly define it in their study. The different interpretations of OMT across studies raises the following fundamental questions: Is OMT the equivalent or rather a subset of osteopathic medicine? And what has been studied? A technique, a set of individually tailored techniques, or the application of an unexplicited theoretical osteopathic concept? In the study,¹ Licciardone et al started the treatments with a standard diag-

nostic evaluation, but the step from findings to treatment plan, as well as the applied techniques and approached body structures, cannot be retrieved. Were tissue stretches limited to muscles? Did the physicians apply visceral techniques in the pelvic or abdominal region?

To our understanding, OMT is seen as a black box. In other words, it is seen as a subset of osteopathic medicine that contains “typical” osteopathic techniques that are applied according to a “typical” osteopathic way of reasoning, and that reasoning is difficult to disentangle on the basis of existing literature. If this deduction is correct, osteopathic medicine is probably widely misunderstood.

Let's illustrate this misunderstanding with recent evolutions in Belgium, a small country in Europe where legislation is being adapted to regulate nonconventional medicine. A Belgian health technology assessment report⁴ from 2010 was published regarding the evidence base of osteopathic medicine. The researchers, who are experts in literature research but who were not familiar with nonconventional medicine, pooled studies with vertebral manipulation as intervention, regardless of whether the intervention was defined as “high velocity low amplitude” (HVLA) or “osteopathic manipulative treatment” (OMT). These researchers thus reduced osteopathic medicine to a treatment method of spinal manipulations and described its limited evidence base. They probably did not know that OMT contains a wide range of techniques not limited to HVLA techniques. Moreover, judging on the efficacy of spinal manipulation, the report did not discriminate between

manipulation applied by manual therapists, chiropractors, and osteopaths or osteopathic physicians. Yet the conclusions of this report⁴ are key in the debate of the regulation of osteopathic medicine in Belgium as nonconventional manual therapy.

In an attempt to better understand the true nature of osteopathic medicine, we looked at the educational programs of the Belgian schools of osteopathy.⁴ According to a document of the World Health Organization to streamline osteopathic education worldwide,⁵ most Belgian schools offer osteopathy in the cranial, visceral, and parietal (musculoskeletal) field. So does the biggest and most widespread institution for osteopathic education in Europe, The International Academy of Osteopathy, which has locations across the globe. By contrast, the only Belgian university that offers education in osteopathy (Université Libre de Bruxelles) limits its program to the parietal field, a part that is excluded from the education program at The Sutherland College of Osteopathic Medicine. With such different curricula, it is difficult to understand how students at all of these institutions will be registered the same way, as osteopaths. In our opinion, these major disparities in osteopathic education reflect the same identity confusion as seen in the literature about OMT.

To better study, understand, and regulate osteopathic medicine, we need a robust osteopathic vocabulary that clearly describes osteopathic techniques and concepts. This vocabulary must be commonly accepted by the osteopathic world and consistently used in education, re-

search, and practice. It would be a significant step to a better understanding of a treatment method that—at least in Belgium—is not appreciated or even tolerated by the medical community, despite all of the local and international struggles for the status of an autonomous medical profession. (doi:10.7556/jaoa.2013.030)

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Response

Leysen and colleagues¹ make some interesting points and pose several provocative questions. They begin by noting that the recent report of favorable outcomes relating to chronic low back pain in the OSTEOPATHIC (OSTEOPATHic Health outcomes In Chronic low back pain) Trial used the acronym *OMT* to represent “osteopathic *manual* treatment” rather than “osteopathic *manipulative* treatment,”² thereby raising (in their view) existential concerns relating to osteopathic identity. This conclusion appears to hinge on their observation that OMT consists of many manual techniques beyond “spinal manipulation,” which are largely unknown within the wider medical community. They assert that such manual techniques were not described in our report, although we indicated that the lumbosacral, iliac, and pubic regions were targeted for treatment with moderate-velocity, moderate-amplitude thrusts; high-velocity, low-amplitude thrusts; soft tissue techniques; myofascial release; counterstrain; and muscle energy.² The latter 5 are among “the seven care modalities in osteopathic manual medicine.”³

Leysen and colleagues’ questions about the specificity of our OMT protocol betray their interest in the broader di-

chotomy of efficacy vs pragmatic trials. The OSTEOPATHIC Trial was designed to achieve a balance between these 2 approaches with the intent of maintaining scientific rigor while also informing clinical practice. Flexibility of the experimental intervention is one dimension in which the efficacy vs pragmatic dichotomy may be assessed.⁴ The OSTEOPATHIC Trial used an OMT protocol that has been described as “algorithmic.”⁵ This description means that OMT providers were trained in performing the diagnostic evaluation at each session and then delivering the 6 designated techniques within the targeted anatomical regions, but with the flexibility to avoid certain techniques when contraindicated or to add optional techniques (within time constraints) when indicated. Patients in the OSTEOPATHIC Trial had a high baseline prevalence of somatic dysfunction in the lumbar, sacral, pelvic, and innominate regions.⁶ Thus, rather than being a “black box,” our algorithmic multimodal OMT approach may have been responsible for the favorable results we achieved with OMT as compared with previous manual therapy studies that have often relied on unimodal manipulative approaches such as high-velocity, low-amplitude thrusts to achieve only marginal results.⁷ Interestingly, while the primary outcomes of the OSTEOPATHIC Trial immediately bolstered the evidence for treating patients with nonspecific chronic low back pain with OMT, other secondary analyses have identified reduction of serum tumor necrosis factor- α as a possible mediator of the observed OMT effects.⁵

The heterogeneity of osteopathic education and training internationally and the disparate practice rights afforded to osteo-

pathic licensees across national boundaries defy a uniform assessment of the challenges encountered by osteopaths abroad in dealing with such terms as “OMT,” “osteopathy,” and “osteopathic medicine.” Clearly, however, national differences exacerbate the confusion within the allopathic medical community about osteopathic terms and concepts. Nevertheless, a framework for the robust osteopathic vocabulary that Leysen and colleagues¹ seek already exists in the *Glossary of Osteopathic Terminology*.³ The *Glossary* aims to standardize terminology based on a consensus within the osteopathic profession and to assist other professionals in understanding and making proper use of this terminology. (doi:10.7556/jaoa.2013.031)

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Correction

The author regrets an error that appeared in the following article:

Noll DR. The short-term effect of a lymphatic pump protocol on blood cell counts in nursing home residents with limited mobility: a pilot study. *J Am Osteopath Assoc*. 2013;113(7):520-528. doi:10.7556/jaoa.2013.003.

The author neglected to cite the funding source in his article. The following statement should have appeared on page 520: “Funding: This study was supported by a grant from the A.T. Still University Strategic Research Fund.”

This change will be made to the full text and PDF versions of the article online.