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Letters to the editor are considered for publication in the *JAOA* with the understanding that they have not been published elsewhere and that they are not simultaneously under consideration by any other publication.

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Letter writers must include their full professional titles and affiliations, complete preferred mailing address, day and evening telephone numbers, fax numbers, and e-mail address. In addition, writers are responsible for disclosing financial associations and other conflicts of interest.

Although the *JAOA* cannot acknowledge the receipt of letters, a *JAOA* staff member will notify writers whose letters have been accepted for publication. Mailed submissions and supporting materials will not be returned unless letter writers provide self-addressed, stamped envelopes with their submissions.

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Although the *JAOA* welcomes letters to the editor, readers should be aware that these contributions have a lower publication priority than other submissions. As a consequence, letters are published only when space allows.

Maintenance and Improvement of Interobserver Reliability of Osteopathic Palpatory Tests

To the Editor:

We applaud the efforts by Brian F. Degenhardt, DO, and colleagues,¹ published in the October 2010 *JAOA—The Journal of the American Osteopathic Association*, to document maintenance and improvement in the interexaminer reliability of osteopathic physicians' palpatory skills. Because reliable palpatory diagnosis is fundamental to osteopathic

diagnosis and treatment, this subject matter is an important area to explore. Furthermore, the demonstration of interexaminer reliability is a prelude to an objective basis for description of somatic dysfunction.

In diagnosis and treatment, osteopathic physicians examine tissue texture and drag, structural asymmetry, tenderness or tightness of underlying tissues, pain response to pressure, and response to introduced motion. As a profession, we must work to reconcile the diversity of these various osteopathic diagnostic

and treatment approaches.

In 1982, Johnston et al² described consistency of palpatory findings with a high degree of accuracy and interexaminer reliability within a select population. As reported in the study by Degenhardt et al,¹ careful training and hand placement with periodic recalibration can result in credible diagnostic accuracy. These new findings resonate well with those published in 1982.²

In a world of increasing demands for evidence-based medicine, this type of evidence is invaluable to the osteopathic medical profession.

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References

1. Degenhardt BF, Johnson JC, Snider KT, Snider EJ. Maintenance and improvement of interobserver reliability of osteopathic palpatory tests over a 4-month period. *J Am Osteopath Assoc*. 2010;110(10):579-586.
2. Johnston WL, Elkiss ML, Marino RV, Blum GA. Passive gross motion testing: part II. A study of interexaminer agreement. *J Am Osteopath Assoc*. 1982;81(5):304-308.

Current and Distinctive Terminology: Osteopath and Physician

To the Editor:

I read with great interest the letters of Tyler C. Cymet, DO,¹ and Thomas Wesley Allen, DO, MPH,² in the December 2010 *JAOA—The Journal of the American Osteopathic Association* regarding the use of language in describing physicians who are trained in the lineage of Andrew Taylor Still,

MD, DO. Dr Allen's² assertion that *osteopathy* is a term that has been relegated to "historical, sentimental, and informal" purposes is well-taken and well-founded—as is Dr Cymet's¹ view that we need to agree on terminology. For these reasons, I propose a solution that might speak to both positions and, at the same time, create a professional environment that is perhaps more honest than the environment of the past 50 years.

I propose that we eliminate the word *osteopathic* as an adjective to describe *medicine* altogether, unless it is used in direct reference to the application of the mechanical principles first described by Dr Still in the late 19th century and developed since then. Let all those who now have a DO degree be regarded simply as *physicians*, reflecting the fact that we have worked hard for the parity we have gained with the allopathic medical profession. This lack of distinction seems appropriate and will, no doubt, be welcomed by many DOs. The relative lack of practice by most DOs of anything resembling osteopathic manipulative treatment (OMT) is further reason to embrace the less descriptive terms of *medicine* and *physician*.

Although this change in terminology may create some entrepreneurial and political lockjaw surrounding board examinations, accreditation, and subsequent specialty college credentialing, I believe the honesty of such lack of descriptors more accurately portrays the majority of today's osteopathic physicians. It is a well-documented reality that the greatest difference between osteopathic physicians and allopathic physicians—OMT—is rarely practiced by most DOs.³ We may work to split hairs and beat our chests about the "holistic approach" or "bedside manner" that the osteopathic philosophy has afforded us, but facts belie our promises. We have no monopoly on holistic care. Pleasant bedside manner is not unique to DOs. It is OMT that is supposed to set us apart from allopathic physicians.

I further propose that we retain the descriptors of *osteopathy* and *osteopath* for those of us who actually practice the art and science of OMT that we were given by our teachers. To that end, a practitioner can choose to be a *physician* or a *physician and osteopath*. Not only would this distinction allow us to define more clearly what we do, but it would also honor the terms established by Dr Still more than 100 years ago—terms that still accurately describe the intention of the manual treatment model of our profession, regardless of the model we actually follow.

Such use of *osteopathy* and *osteopath* would also reduce confusion on the part of the public. No longer would I hear the story of how a patient sought the help of an osteopathic physician only to find out that the DO did not use OMT in his or her practice.

Eliminating the descriptor *osteopathic* would embrace the differences that we all have in our practices, and it would mean that physicians no longer have to identify themselves as something that they are not. Allowing the descriptor *osteopath* would embrace our heritage and our uniqueness, and it would clearly identify us as providing a service that is increasingly rare, that is increasingly important, and that provides increasingly added value to patient care.

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References

1. Cymet TC. It means just what I choose it to mean—neither more nor less [letter]. *J Am Osteopath Assoc*. 2010;110(12):745-746.
2. Allen TW. Osteopathic medical terminology—redux [letter]. *J Am Osteopath Assoc*. 2010;110(12):743-744.
3. Johnson SM, Kurtz ME. Diminished use of osteopathic manipulative treatment and its impact on the uniqueness of the osteopathic profession. *Acad Med*. 2001;76(8):821-828.

Redirect Terminology Debate Toward Improved Definition of Osteopathic Medicine

To the Editor:

With all due respect to those who have been in the osteopathic medical profession longer than I have, it is my humble opinion that the debate over osteopathic terminology is much less important than the debate over what osteopathic medicine itself means. This issue is admirably discussed, in the context of psychiatry, by Niall McLaren, MBBS,¹ in his special communication article in the December 2010 issue of *JAOA—The Journal of the American Osteopathic Association*.

The terminology debate makes me wonder how many of the people who want to change the term *osteopathy* in the *cranial field* (OCF) actually practice OCF—or even feel that OCF is a valid therapeutic approach. It would be interesting to poll the members of the American Academy of Osteopathy, the Cranial Academy, or the Sutherland Cranial Teaching Foundation to see if any of these individuals, who are much more likely than the average DO to either practice OCF or to defend its efficacy, would favor a terminology change to something that does not involve the apparently maligned term *osteopathy*. Perhaps these members would feel loyalty to the term because they see value in osteopathy.

One can be an osteopathic physician without practicing osteopathic manipulative treatment (OMT). However, I suspect that someone who practices OMT is more likely to proudly identify himself or herself as a DO and to provide good reasons, both in word and deed, as to how osteopathic medicine is different. Could these same things be said of those who want to completely eliminate the term *osteopathy* from usage?

Perhaps energy spent toward changing terms would be better spent

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further defining the meaning of *osteopathic medicine* and the reasons that osteopathic medicine is important as a separate system. Such explanations would allow every osteopathic medical student in every college of osteopathic medicine (COM), no matter how new the COM, to feel like he or she is part of a well-defined profession with a clearly defined mission—as opposed to feeling like he or she is merely in a medical school with additional curricula that is not respected by most basic science teachers or clinical preceptors.

Why does the American Osteopathic Association's Intern/Resident Registration Program (ie, the AOA "Match") have so few applicants, as per the letter by Kenneth J. Steier, DO,² in the December 2010 *JAOA*? Go to most any COM and ask the students. If they are being honest, most will tell you that they feel that anything "osteopathic" is subpar. And why is that? Perhaps it is partially because there is no clearly defined aspect of osteopathic medicine except OMT, which most of their clinical preceptors (who are MDs close to half of the time³) do not actually practice.

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References

1. McLaren N. Toward an osteopathic psychiatry: the biocognitive model of mind. *J Am Osteopath Assoc*. 2010;110(12):725-732.
2. Steier KJ. Is something wrong with osteopathic graduate medical education [letter]? *J Am Osteopath Assoc*. 2010;110(12):740-741.
3. Teitelbaum HS. *Osteopathic Medical Education in the United States: Improving the Future of Medicine*. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2005:41-42. <http://www.aacom.org/resources/bookstore/Documents/special-report.pdf>. Accessed February 9, 2011.

Understanding Osteopathic Medical School Applicants and the Class of 2014

To the Editor:

As the newest class of student doctors begins their journey to become osteopathic physicians, we would like to highlight recently reported survey results published by the American Association of Colleges of Osteopathic Medicine (AACOM)¹ about certain characteristics of the class of 2014. These findings, which have important implications for the recruitment and training of future osteopathic medical students, may be of interest to faculty and administrators at colleges of osteopathic medicine (COMs).

The AACOM study¹ presents results from an intriguing survey of more than 12,000 students who applied to COMs in 2009 for admission to the class of 2014. Respondents (2701 of 12,617 [21.4%]) answered a diverse series of questions concerning their medical school application choices (ie, osteopathic only or osteopathic and allopathic), acceptance outcomes, enrollment decisions, and educational achievements (ie, grade point average, Medical College Admission Test score). These data indicate that 69.8% (1885 of 2701) of respondents applied to both osteopathic and allopathic medical schools, and that 54.8% (1480 of 2701) of respondents were accepted to at least 1 COM, compared to 37.6% (709 of 1885) who were accepted to an allopathic medical school.

Interestingly, of the 1480 respondents who were accepted to at least 1 COM, only 66.2% (980 of 1480) actually enrolled in a COM the following academic year.¹ Moreover, of the 500 respondents who were accepted to a COM but did not matriculate to a COM, 83% (415 of 500) matriculated for classes at an allopathic medical school. These data reveal that many aspiring physicians are applying to both osteopathic and allopathic medical schools, but when accepted to both types of medical schools, applicants overwhelmingly decide to

enroll in allopathic medical schools.

Results from additional questions on the AACOM survey¹ provide a greater understanding of why osteopathic medical school applicants choose to enroll in allopathic vs osteopathic medical schools when admitted to both types of institutions. For example, respondents were asked to select those factors that were most influential in their enrollment decisions. Respondents who enrolled in osteopathic medical schools and those who enrolled in allopathic medical schools had several reasons in common for their enrollment decisions. For example, the majority of students in both groups indicated that geographical location was among the top reasons for selecting a medical school.

However, students in the 2 groups differed in the reported importance of several factors that they considered in their enrollment decisions. For example, 49% of respondents who enrolled in allopathic medical schools indicated that cost was an important factor in their decision-making process, compared to only 14% of respondents who enrolled in COMs.¹ In addition, 39% of respondents who enrolled in allopathic medical schools indicated that degree preference was an important factor in their decision, compared to only 18% of respondents who enrolled in COMs.

Based on the results of the AACOM survey,¹ students who are admitted to both osteopathic and allopathic medical schools choose to enroll in allopathic medical school because of location, cost, and a preference for obtaining an MD degree rather than a DO degree. These findings were likely influenced by the fact that there are many more public allopathic medical schools with lower tuition costs compared to osteopathic medical schools, the majority of which are private. However, these findings also suggest that an inherent bias exists in the perceived value between MD and DO degrees, resulting in a preference for enrollment in allopathic medical schools over osteopathic medical schools.

Understanding why medical school

applicants choose to enroll in allopathic vs osteopathic medical schools has important implications for the future of osteopathic medicine. The study by AACOM¹ reveals that few applicants to COMs (29%) indicated that osteopathic philosophy was an important factor in choosing to enroll in a COM. How might this finding relate to student attitudes toward osteopathic manipulative medicine (OMM) and osteopathic manipulative treatment (OMT)? This relationship is worth exploring, because a lack of enthusiasm or understanding of osteopathic philosophy might be correlated with a lack of interest in pursuing a career in medicine that incorporates OMM and OMT.

Understanding why osteopathic philosophy plays such a small role in students' decisions to enroll in COMs is also relevant in the context of the growing number of COM graduates entering internships and residencies accredited by the Accreditation Council for Graduate Medical Education (ACGME).^{2,3} Furthermore, understanding this matter is important in the context of the diminished use of OMT by osteopathic physicians.⁴

Despite the growth in the numbers of COM applicants and graduates, data in the AACOM study¹ indicate that applicants to COMs (including many in the class of 2014) were motivated to enroll in COMs for reasons other than a desire to become an osteopathic physician or to become trained in OMM. What can be done to recruit students who have genuine interest in osteopathic medicine and professional aspirations for life-long careers practicing OMM? Results from the AACOM study¹ indicate that more than 50% of survey respondents already had definite plans to pursue careers in medicine by the time they had graduated from high school. Given that it is likely that most high school students know little (if anything) about osteopathic medicine, these results suggest that the development of more diverse methods to disseminate information about osteopathic medicine, osteopathic

medical education, and osteopathic philosophy to this young population of future physicians is in great need. Moreover, recruitment programs targeting students in the earliest years of college might help to combat the bias and prejudice against the DO degree that develops by the time students apply to osteopathic medical schools.

Results from the AACOM study¹ quantitatively describe what many osteopathic students, as well as faculty and administrators at COMs, may have already suspected—many osteopathic medical students are primarily motivated by a general career goal in medicine, *not* osteopathic medicine in particular. These data might also provide clues to understanding the current trends of decreased interest among first-year osteopathic medical students in pursuing careers in primary care and of the decreased number of COM graduates in primary care residency programs.⁵ These trends indicate that applicants and matriculates are not especially interested in osteopathic medical schools because of a perceived focus in training primary care physicians. In fact, these students may view a COM's focus on primary care as a negative attribute that might limit their future professional opportunities.

Results from the AACOM study¹ point to important challenges faced by COMs in providing an educational experience that trains the next generation of osteopathic physicians to be competent, culturally aware, and patient-centered, as well as to have a firm understanding and to embrace OMM and osteopathic philosophy.

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References

1. Meron J, Levitan T. 2009 Applicants to COCA-Accredited Osteopathic and LCME-Accredited Allopathic Medical Schools: A Survey Analysis of the 2009 AACOMAS Applicant Pool. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2010. <http://www.aacom.org/resources/bookstore/Documents/AppRpt2009.pdf>. Accessed January 21, 2011.
2. Freeman E, Duffy T, Lischka TA. Osteopathic graduate medical education 2010. *J Am Osteopath Assoc*. 2010;110(3):150-159.
3. Cummings M, Sefcik DJ. The impact of osteopathic physicians' participation in ACGME-accredited postdoctoral programs, 1985-2006. *Acad Med*. 2009;84(6):733-736.
4. Johnson SM, Kurtz ME. Diminished use of osteopathic manipulative treatment and its impact on the uniqueness of the osteopathic profession. *Acad Med*. 2001;76(8):821-828.
5. Levitan T, Shannon SC, Meron J. *Some Factors Impacting Osteopathic Medical School Graduates' Specialty Selection—A Preliminary Exploration of Recent Historical Data*. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2009. <http://www.aacom.org/resources/other/Documents/Factors%20Impacting%20Specialty%20Selection.pdf>. Accessed January 22, 2011.

Response

Raddy L. Ramos, PhD, and colleagues have highlighted several of the issues that the American Association of Colleges of Osteopathic Medicine (AACOM) identified in the survey analysis of the AACOM Application Service applicant pool for the class of 2014.¹ The AACOM staff uses such reports—and others that are available on the Data and Trends pages of the AACOM Web site (<http://www.aacom.org/data/Pages/default.aspx>)—to prepare the messages that AACOM communicates to prospective and current osteopathic medical students.

Ramos et al raise important questions about whether most of our applicants have an orientation toward osteopathic medicine, or whether they simply see osteopathic medical school as one more path to becoming a physician—a career selected by many applicants well before graduation from high school. Regardless of whether incoming osteopathic medical students are committed to osteopathic principles and practice when they enter medical school, studies

have demonstrated that students are satisfied with their osteopathic medical school education and their choice to become osteopathic physicians. This conclusion is highlighted by several items in the *AACOM 2008-09 Academic Year Survey of Graduating Seniors Summary Report*²:

- Eighty-six percent of respondents were either satisfied or very satisfied with the quality of their osteopathic medical training; only 4% of respondents were dissatisfied.
- Eighty-eight percent of respondents were either satisfied or very satisfied with their osteopathic medical career selection; only 2% of respondents were dissatisfied.
- If given the chance to start professional training again, 75% of respondents would attend an osteopathic medical school, and 60% would attend their same osteopathic medical school. Only 20% of respondents would attend an allopathic medical school, and 6% of respondents would not attend medical school.

A better understanding of the interests and motivations of our applicants guides us in our recruiting and education activities. AACOM recruitment efforts continue to raise awareness among potential students regarding the characteristics and benefits of osteopathic medicine. Evidence of the effectiveness of these efforts includes the exponential growth in the number of aspiring physicians applying to osteopathic medical school. Over the past 8 years, the number of applicants to osteopathic medical schools has doubled, and the class starting in 2011 represents the fifth consecutive year of a record high number of incoming osteopathic medical students.^{3,4}

The same survey used in the report¹ cited by Ramos et al was administered to applicants for the class of 2015, and a report on these survey results is in preparation. Other reports available on the AACOM Web site include surveys of

entering osteopathic medical students and graduating seniors regarding debt, career plans, and satisfaction with osteopathic medical education, as well as summary data on enrollment, faculty, curriculum, and operations of osteopathic medical schools.

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References

1. Meron J, Levitan T. 2009 Applicants to COCA-Accredited Osteopathic and LCME-Accredited Allopathic Medical Schools: A Survey Analysis of the 2009 AACOMAS Applicant Pool. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2010. <http://www.aacom.org/resources/bookstore/Documents/AppRpt2009.pdf>. Accessed January 21, 2011.
2. Research Department, American Association of Colleges of Osteopathic Medicine. *AACOM 2008-09 Academic Year Survey of Graduating Seniors Summary Report*. Chevy Chase, MD: American Association of Colleges of Osteopathic Medicine; 2010. <http://www.aacom.org/resources/bookstore/Documents/2008-09SeniorSurvey.pdf>. Accessed January 24, 2011.
3. Applications, first-year enrollment, total enrollment and graduates by osteopathic medical school. American Association of Colleges of Osteopathic Medical Schools Web site. <http://www.aacom.org/data/studentenrollment/Documents/Apps-Enroll-Grads-by-School-092310.pdf>. Accessed February 3, 2011.
4. AACOMAS applicants to osteopathic medical schools (summary). American Association of Colleges of Osteopathic Medical Schools Web site. <http://www.aacom.org/data/applicantsmatrix/Documents/FF-Applicants-010711.pdf>. Accessed February 3, 2011.

AOA Not Enforcing OMM Educational Standards

To the Editor:

After I left academia, I kept in touch with a former student who is now on her third-year clinical rotations as a student osteopathic physician. During her surgical rotation, her team cared for a patient with postoperative ileus. She asked the surgical resident if osteopathic manipulative medicine (OMM) could be applied to the patient. The resident told her that the patient should not be "twisted and popped" because the

patient was too sick for OMM. My student replied that she was trained by her college of osteopathic medicine (COM) faculty to administer OMM specifically designed for this patient's problem, consisting only of a gentle technique. Post-operative ileus has shown positive clinical response to OMM.^{1,2} The resident merely changed the subject, and the rounds moved on.

This was not an allopathic hospital or an allopathic resident. This was an osteopathic surgical resident who was training at an osteopathic hospital in Michigan. The resident had graduated from a COM accredited by our own Commission on Osteopathic College Accreditation (COCA). He is training in a surgical program at a hospital accredited by the American Osteopathic Association (AOA).

Our profession's accreditation standards require clinical OMM training in both the COM and hospital setting. Yet the absence of clinical OMM training is nearly profession-wide. Educational standards for OMM are clearly not being followed, and yet the accreditation of these colleges and hospitals remains active and repeatedly gets renewed.

Having seen COCA operate during my 9 years in osteopathic academia, I know how this problem continues. I have never seen COCA accreditors ask for any *evidence* of OMM training. I have seen accreditors accept reports of osteopathic clinical training but never ask for the curricula, sign-in sheets, clinical logbooks, or chart notes that would document it. Without requirements to produce solid evidence of training, institutions are free to report ambitious plans and programs that never have to mature or operate. Using such plans as a basis for accreditation, and without routine follow-up to ensure that these plans ever operate, institutions may abandon actual programs in favor of "looking like we are about to start."

I have reviewed 2 clinical OMM distance-learning programs (from COMs in the Midwest) that were clearly designed for accreditors instead of for

students. The authors of these programs obviously had no recent hospital experience and did not seriously intend for students participating in the programs to run to the wards and apply what they had learned. I have also observed OMM rounds at an AOA-accredited hospital conducted only 2 afternoons a week and staffed only with students led by an intern. Osteopathic manipulative treatment was delivered as quickly as possible to 1 or 2 patients, and the team then returned home without a backward glance.

Our accreditors seem to ask for no more than token compliance to OMM educational standards from the colleges and hospitals that they inspect. "Something is better than nothing."... "Look like you are trying." These words are the real standards to which our "unique and distinctive profession" holds itself.

The Commission on Osteopathic College Accreditation has published new standards, effective as of July 2010.³ These standards state the following³:

The COM should have in place learning programs in OMM/OPP [osteopathic principles and practice] for students during their third and fourth years that include both didactic content (may be delivered by distance education technology) and hands-on opportunities under faculty/preceptor supervision which include osteopathic physicians. The assessment process through all four years should be appropriate for both cognitive and psychomotor learning.

Our profession has its own standards about its own standards, especially with regard to OMM education. I have no confidence that these new standards will be any better enforced than the old ones.

Many leaders in our profession do not use OMM in their own practices or for their own families, in part because they do not know how to do so. They do not know how to use OMM because their COMs and hospitals did not teach them clinical OMM, despite multiple

requirements to provide such training. I suspect that the surgical resident mentioned at the beginning of this letter has had no clinical experiences with OMM. He could not use OMM to restart his patient's stalled peristalsis. He could not even give the idea serious consideration. None of his mentors will have used OMM. Yet, deep in the file cabinet in the residency director's office, there likely lurks the "OMM Plan" for integration of OPP in their program. This document will be dusted off just before the accreditation team visits, and then it will be returned to storage until needed again.

Our profession pays wonderful lip service to the ideas behind OMM, while it conducts "ghost" clinical OMM programs in its own COMs and hospitals. Our profession establishes OMM educational standards for those COMs and hospitals, but it applies the standards with the understanding that any token attempt to look busy will keep the AOA happy.

This is (another) dangerous time for osteopathic medicine. We are our own enemy, passively undermining ourselves. If an outside agency prohibited our students and residents from applying OMM, we might arouse ourselves to advocate for our rights to teach and practice osteopathic medicine. Patients in osteopathic hospitals go untreated, while osteopathic physicians go untrained. The osteopathic medical profession has a lax attitude about educating future members in our own distinctive care.

If the AOA were truly enforcing its own educational standards, surgical residents would be treating patients with OMM, and osteopathic medical students would not have to ask about the role of OMM in their patients' care.

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References

1. Crow WT, Gorodinsky L. Does osteopathic manipulative treatment (OMT) improve outcomes in patients who develop postoperative ileus: a

retrospective chart review. *Int J Osteopath Med*. 2009;12(1):32-37.

2. American Association of Colleges of Osteopathic Medicine. *Clinical Osteopathically Integrated Learning Scenarios*. Chevy Chase, MD: Educational Council on Osteopathic Principles, American Association of Colleges of Osteopathic Medicine; 2001:87-94.

3. Commission on Osteopathic College Accreditation. *Accreditation of Colleges of Osteopathic Medicine: COM Accreditation Standards and Procedures*. Chicago, IL: American Osteopathic Association; 2010.

Response

I recognize, as does Dr McCombs, that the clinical education of our third-year and fourth-year osteopathic medical students with regard to the use of osteopathic manipulative treatment needs to be improved. I addressed this deficiency in my Northup Lecture in March 2007.¹ In addition, I have functioned as a clinical inspector for the Committee on College Accreditation Training, which reports to the American Osteopathic Association's (AOA) Commission on Osteopathic College Accreditation (COCA). Many of us who have served as clinical inspectors have expressed the opinion that the previous standard 6.3 "had no teeth."

In 2006, COCA began a concerted effort to revise its standards. A Standards Review Committee (SRC), chaired by Humayun (Hank) Chaudhry, DO, was created. I served on the original SRC and, subsequently, became its chair in 2008. The SRC met through the fall of 2009 and revised multiple standards, including 6.3, the standard referred to in Dr McCombs' letter. Early in 2010, these revisions were distributed for public comment to several recipients, including the AOA, the American Association of Colleges of Osteopathic Medicine, every college of osteopathic medicine, and every specialty college. In April 2010, a public forum was held, and all the recipients of the revised standards were invited to attend to discuss the revisions. At this forum, the AOA, the American Academy of Osteopathy, and the American College of Osteopathic

Family Physicians supported the revisions to standard 6.3. The revised standard 6.3 was passed by COCA at its next meeting, and it went into effect in July 2010.²

It is my opinion that—although the revised standard 6.3 is not perfect—it does give clinical inspectors much better parameters to use on site visits. The question for those of us on the SRC is how the standard can be further improved. Input is needed from concerned educators and other individuals. We hope that the previously mentioned groups as well as other groups (such as the Educational Council on Osteopathic Principles, Student Osteopathic Medical Association, and Undergraduate American Academy of Osteopathy) will discuss this issue and offer input to the SRC. Directors of medical education and directors of residency programs also need to address this crucial issue.

Concerned osteopathic physicians need to apply to COCA to become clinical inspectors—especially those DOs with a passion for seeing osteopathic manipulative treatment used. For its part, COCA needs to reassess its reimbursement rate for clinical inspectors if it wants to expand the ranks of individuals conducting inspections. An honorarium of \$150 per day hardly offsets the overhead expenses that are ongoing in a osteopathic physician's office while the doctor is out performing an inspection.

Finally, osteopathic physicians who wish to see improvements in standards need to let the president-elect of the AOA know that they desire to serve on committees of the AOA—including COCA, where changes to standards can be made.

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References

1. Cantieri MS. Teaching Osteopathic principles in an allopathic environment: osteopathic guerrilla warfare. *Am Acad Osteopath J*. 2007;17:12-14.

2. Commission on Osteopathic College Accreditation. *Accreditation of Colleges of Osteopathic Medicine: COM Accreditation Standards and Procedures*. Chicago, IL: American Osteopathic Association; 2010.

Dr McCombs has submitted a scathing criticism of American Osteopathic Association (AOA) enforcement of osteopathic college and postdoctoral training program standards. Both predoctoral and postdoctoral activities are sponsored by the AOA. The predoctoral accreditation is regulated by the Commission on Osteopathic College Accreditation (COCA), and the postdoctoral activities are regulated by the Program and Trainee Review Council (PTRC) under the authority and policy oversight of the AOA Council on Osteopathic Postdoctoral Training (COPT).

Dr McCombs refers to an incident in which a surgical resident failed to respond to a student's question regarding use of osteopathic manipulative medicine (OMM) in treating a patient with postoperative ileus. He implies that the surgical resident's apparent lack of knowledge, understanding, or use of the suggested treatment reflects a general lack of compliance with OMM training standards and a lack of enforcement of these standards in the accreditation process of AOA programs.

It should be pointed out that the lack of conducting a particular therapeutic element in a trainee's clinical practice has no relationship to the element's level of compliance enforcement in the accreditation site review of the training program. The program accreditation process does not evaluate the use of every element required in the standards by every resident in each case. Accreditation is a validation of compliance with a majority of required training standards. The benefits of OMM and osteopathic principles and practice (OPP) are required to be taught to all residents, as applicable to specific specialties, in every AOA training program.

A summary of postdoctoral accred-

itation site reviews begins with development with a set of specialty-specific basic standards (ie, requirements). Multiple standards of general clinical, administrative, procedural, and academic relevance are always included in reviews. The inclusion of standards specific to osteopathic medicine is always required for each specialty.

In addition, the AOA has incorporated a set of core competencies, in which proficiency must be evaluated annually by program directors. The programs must achieve proficiency in the core competencies by the conclusion of training. The OPP competency, in which OMM is included, is required to be integrated into each of the other 6 competencies of an osteopathic physician. Each specialty college's Council on Education and Evaluation reviews achievement in the core competencies annually. Every single required standard is listed in a Standards Inspectors Workbook (ie, Standards Crosswalk) used by the reviewer and is evaluated as "met" or "unmet." Patient charts, of cases in which interns and residents have participated in patient care, are reviewed for evidence of structural examination and OMM performance as indicated.

When OPP/OMM deficiency citations are noted, the PTRC will reduce the continuing approval of the program by 1 full year. For every cited deficiency, a program is required to submit a corrective action plan, which must be approved by the respective specialty college. Then, documentation of implementation of that plan must be submitted within 180 days. This mechanism involves OMM citations as well as any other training citations. Equal compliance is required for osteopathic (ie, OPP/OMM) standards as for any other clinical, academic, or administrative standard.

Dr McCombs indicates that curricula, sign-in sheets, clinical logs, and chart notes are never requested during site reviews of programs. However, those items are the exact documentation that is always requested for validation of

compliance. Dr McCombs also states, "Many leaders in our profession do not use OMM in their own practices or for their own families. ... They do not know how to use OMM because their COMs and hospitals did not teach them." Contrary to this claim, however, if individuals do not use OMM, it is unlikely that a lack of teaching can be blamed. Based on multiple personal observations, we believe it is more likely that these individuals chose not to use OMM as a result of time unavailability, reimbursement issues, or unfavorable regard for OMM. Lack of OMM use in practice is not always related to lack of teaching.

For the past 12 years, Osteopathic Postdoctoral Training Institutions (OPTIs) have been the required accreditation model for all AOA training programs. All OPTIs include COMs as partners in the educational continuum of osteopathic medical students and residents. Most research and development of OMM teaching modules and methods occurs at the COMs. That exposure is a required element for accreditation of OPTIs, as well as for all of their programs and their trainees.

The COPT has recently recommended to the AOA Board of Trustees that full-time professional reviewers be employed for all postdoctoral training program reviews. The purpose of this recommendation is to consistently enforce all standards and to validate program compliance through objective documentation.

In conclusion, not all osteopathic physicians use OMM in their practices, but many do. Those who do use OMM were taught in the same COMs and residency programs as those who do not use OMM. The AOA educational system is a good resource for training. We will always continue to enhance and enforce OMM standards.

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Osteopathic Manipulative Treatment in Developing Countries: A Call for Education and Research

To the Editor:

In an editorial published in the March 2001 *JAOA—The Journal of the American Osteopathic Association*, Debra A. Smith, DO,¹ urged us to expand our minds and consider the osteopathic medical profession 15 years into the future as a profession that had actively moved into the global arena. She challenged our institutions to "become official 'WHO [World Health Organization] Collaborating Centers' and involve themselves in various WHO high-priority research projects around the world."¹ Dr Smith provided several inspiring ideas about how to unite our profession internationally and revolutionize healthcare delivery. Yet, in 2010, a PubMed search for osteopathic manipulative treatment (OMT) in developing countries yielded no results.

The start of 2011 marked the end of the first Bone and Joint Decade, an initiative by the United Nations and the WHO to address the increasing burden of musculoskeletal conditions globally.^{2,3} Global health priorities are quickly shifting from infectious diseases to chronic diseases. As longevity increases and physical activity continues to decline in the developing world, the need for cost-effective interventions for individuals with musculoskeletal conditions is urgent. Musculoskeletal conditions rank eighth globally as a cause of disability-adjusted life-years.⁴ A WHO bulletin published in 2003 showed that the burden of musculoskeletal conditions is greatest in developing countries.⁵ The most common musculoskeletal condition leading to chronic pain is back pain, typically caused by osteoarthritis.⁶

As I walk about the hospital grounds at the Moi Teaching and Referral Hospital in Eldoret, Kenya, I frequently see Kenyan patients, visitors, and healthcare workers with obviously painful somatic dysfunctions. Our allo-

pathic counterparts have created elaborate organizations in this region of Africa to provide healthcare to such individuals, who are in great need. The medications and diagnostic tools that they provide—though extremely beneficial—always come with a price tag, and many of the innovative treatments are not affordable for most individuals. I cannot help but ask myself, where are the DOs? As osteopathic physicians and students, we have the knowledge and skills to not only manage patients' conditions with novel medicines and diagnostic procedures, but we have an additional skill (OMT) that can reduce pain and improve quality of life in a much more cost-effective manner than conventional allopathic treatments.

Musculoskeletal conditions are likely to become an even more neglected problem for millions of individuals around the world in the future. There is no better time than now to create an osteopathic medical presence in global healthcare. In order to take the lead on tackling musculoskeletal problems in a cost-effective way, we should approach the opportunity in a stepwise manner. First, our osteopathic medical institutions need to create our own collaborations with medical schools and hospitals throughout the world to foster an educational exchange of knowledge. With such collaborations, we will have the opportunity to teach our distinct osteopathic skills to healthcare providers, as well as to learn from our international counterparts.

To establish trust and greater understanding of our profession, it is also imperative to conduct research on the use of osteopathic medical techniques in developing regions. Research conducted on the use of OMT for patients with common medical conditions in developed countries has demonstrated the benefits of our unique skills. In particular, OMT has been shown in both the United States and the United Kingdom to be an effective modality for reducing low back pain in patients.⁷ The Osteopathic Research Center, at the Uni-

versity of North Texas Health Science Center in Fort Worth, has been recently founded to move our profession forward in musculoskeletal research. This center is training fellows who have interests in using OMT for treating patients with low back pain, and it is creating a national practice-based research network.⁸ There is no reason that this national initiative cannot act as a model for extending our efforts globally in the near future.

As we enter a new decade and as the next generation of osteopathic health-care providers graduate, I hope that we hit the ground running with OMT in developing nations. We have a tremendous opportunity to help thousands of individuals around the world who continue to suffer because they cannot afford the medications necessary to ease their pain. It is time for us to take advantage of this opportunity and to not only help those in greatest need, but to also make our profession better known in all corners of the world.

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References

1. Smith DA. Going global with osteopathic medicine [editorial]. *J Am Osteopath Assoc*. 2001; 101(3):156-159. <http://www.jaoa.org/cgi/reprint/101/3/156>. Accessed January 22, 2011.
2. Woolf AD. The bone and joint decade 2000-2010 [review]. *Ann Rheum Dis*. 2000;59(2):81-82. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1753078/pdf/v059p00081.pdf>. Accessed January 22, 2011.
3. Bone and joint decade's musculoskeletal portal. Bone and Joint Decade Web site. <http://www.boneandjointdecade.org/>. Accessed January 22, 2011.
4. Woolf AD, Brooks P, Akesson K, Mody GM. Prevention of musculoskeletal conditions in the developing world. *Best Pract Res Clin Rheumatol*. 2008; 22(4):759-772.
5. Woolf AD, Pfleger B. Burden of major musculoskeletal conditions. *Bull World Health Organ*. 2003;81(9):646-656. http://www.scielo.org/scielo.php?pid=S0042-96862003000900007&script=sci_arttext. Accessed January 22, 2010.
6. Brooks PM. The burden of musculoskeletal disease—a global perspective [published online ahead of print April 12, 2006]. *Clin Rheumatol*. 2006; 25(6):778-781.
7. Licciardone JC, Brimhall AK, King LN. Osteopathic manipulative treatment for low back pain: a systematic review and meta-analysis of randomized controlled trials [review]. *BMC Musculoskelet Disord*. 2005;6:43. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1208896/?tool=pubmed>. Accessed January 22, 2011.
8. Licciardone JC. Time for the osteopathic profession to take the lead in musculoskeletal research [editorial]. *Osteopath Med Prim Care*. 2009;3:6. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2724431/?tool=pubmed>. Accessed January 22, 2011.

Case Report of Mesenteric Metastases From Lobular Breast Carcinoma

To the Editor:

Breast cancer is the most common type of malignancy and the second most common cause of cancer-related mortality among women in the United States.¹ Invasive lobular carcinoma (ILC) is the second most common type of primary breast cancer, after ductal carcinoma (DC), and accounts for 8% to 14% of breast cancer cases.^{2,3}

Invasive lobular carcinoma can be difficult to detect in clinical and radiologic examinations because of its diffuse infiltration and the absence of well-defined margins.^{4,5} Noncohesive cells and tendency for infiltration could be linked to a higher probability of ILC recurrence and metastatic disease.⁶ The most common sites of breast cancer metastasis are the lungs, liver, bone, and central nervous system. Although the spread of cancer to these sites is common in both ILC and DC, ILC has been found to metastasize to the gastrointestinal tract, peritoneum-retroperitoneum, and genitourinary organs.^{2,6,7}

In the present letter, we describe a case of an unusual metastatic spread of ILC. This case highlights the need for a high index of suspicion when a patient with breast cancer presents with non-specific gastrointestinal symptoms.

Report of Case

In our case, an 85-year-old woman

underwent treatment for breast carcinoma 15 years before her present hospital admission. The histopathologic mechanisms of this patient's cancer were not known at the time of admission. The cancer stage and lymph node status were also not known. Her treatment for the breast carcinoma consisted of excision of the cancerous tissue. The patient was then followed routinely by her oncologist.

Approximately 3 months prior to the present hospital admission, a solitary pulmonary nodule was discovered on a chest computed tomography (CT) scan. The patient then underwent a CT-guided biopsy of the lung nodule; results of this biopsy were negative for malignancy. However, a pneumothorax developed after the biopsy procedure. Drainage was performed, and the pneumothorax was resolved.

One month prior to hospital admission, the patient underwent a positron emission tomography (PET) scan. Results of this test were reportedly normal according to the patient.

The patient was admitted to the hospital immediately after presentation for decreased appetite, weight loss, malaise, and abdominal pain in the right lower quadrant. She reported progressive weight loss (approximately 26 pounds over 6 months) with worsening fatigue over the past few weeks. She reported at least 1 episode of bloody stools and constipation. The patient attributed the constipation to recent use of acetaminophen and hydrocodone for back pain.

On physical examination after hospital admission, the patient was found to have obvious weight loss, and she appeared fatigued. Her lungs were clear bilaterally with good excursion and minimal effort. Cardiovascular examination revealed slight irregularity in heart rate and rhythm. Breast examination revealed a round, mobile, nontender, mass, 6 to 8 cm in diameter, in the left breast. According to the patient, this mass had been present since surgery on the breast 15 years previously and was

a noncancerous “cyst.” She reported that her oncologist regularly monitored the condition of the mass.

The patient’s abdomen had normoactive bowel sounds and was soft with no organomegaly or masses. The abdomen was minimally tender to palpation in the right lower quadrant at the iliac crest and at the junction of the right costal margin. No guarding and no abdominal wall defects were noted.

Laboratory testing revealed positive results for fecal occult blood. Urinalysis was notable for a protein level of 30 mg/dL, positive leukocyte esterase results, and 10 to 20 white blood cells per high-power field. The white blood cell count was $19,700 \times 10^9/L$. Neutrophil granulocytes made up 72% of the white blood cell count, with an elevated level of $15.1 \times 10^9/L$. The hemoglobin level was stable at 13.9 g/dL, with a hematocrit volume of 41%. Results of chest radiograph and kidney-ureter-bladder tests were negative.

A CT scan performed after admission showed free fluid around the liver and below the diaphragm in the paracolic gutters. Diffuse atherosclerotic disease of the arterial vasculature of the abdomen was noted. No bowel wall thickening and no free air were noted.

The patient underwent a colonoscopy, in which an iatrogenic perforation of the sigmoid colon occurred during advancement of the colonoscope. She was then taken to the operating room for an emergency exploratory laparotomy. A sigmoidectomy was performed without complications. During the operation, the entire abdomen was examined. A minimal amount of ascitic fluid was discovered. No palpable lesions of the colon were identified. In approximately the midpoint of the jejunum, the mesentery was found to be extremely thick and indurated with what appeared to be lymphadenopathy. Because of the suspicious appearance of the mesentery, a biopsy of the mesenteric tissue was taken. No gross abnormalities of the small bowel were noted.

The histologic examination of the mesenteric biopsy revealed atypical, discohesive infiltrate throughout the mesentery, involving 3 of 3 lymph nodes with extracapsular extension. Immunohistochemical stains were performed, and the infiltrating cells were found to be positive for OSCAR cytokeratin, mammaglobin, and GCDPF-15 (gross cystic disease fluid protein of 15 kilodaltons) and negative for LCA (leukocyte common antigen), CD34, and CD117. The immunophenotype and morphologic characteristics were most consistent with metastatic lobular carcinoma.

The patient was offered palliative chemotherapy for stage-IV breast carcinoma, but she declined this treatment.

Comment

The metastatic spread of breast carcinoma to the gastrointestinal system, peritoneum-retroperitoneum, and gynecologic organs is much more prevalent in ILC than in DC. One series of 2605 patients, comparing rates of metastasis from ILC and DC, revealed statistically significant differences ($P < .05$) for metastases of the gastrointestinal tract (4.5% ILC vs 0.2% DC), peritoneum-retroperitoneum (3.1% ILC vs 0.6% DC), and gynecologic organs (4.5% ILC vs 0.8% DC).² The reasons for this distinct metastatic pattern are unclear. It has been suggested that the loss of expression of the cell-to-cell adhesion protein E-cadherin in ILC—a loss that is not observed in DC—may contribute to this type of infiltration.^{3,5,6}

Although metastases to the gastrointestinal tract are infrequent in ILC, patients with breast carcinoma presenting with nonspecific gastrointestinal symptoms need to be thoroughly evaluated to rule out metastatic disease. Cases have been reported of ILC metastases to the esophagus, stomach, and small and large intestines.² Esophageal disease has been shown to present with progressive dysphagia and dysarthria.⁸ Gastric involvement has a variety of symptoms, including early satiety, vomiting, epigastric discomfort, melena, and

dyspepsia. Because of nonspecific symptoms and imaging results, gastric metastases from breast carcinoma can be difficult to distinguish from primary stomach cancer and benign disease processes.^{8,9}

Small bowel metastases can present with symptoms of bowel obstruction, obstructive jaundice, diarrhea, abdominal cramps, and vomiting.^{8,10} Small bowel obstruction has many etiologic mechanisms—adhesions being the most common—making diagnosis of metastatic disease difficult.¹¹ Several cases of rectal involvement have been described with presentations of constipation, tenesmus, heme-positive stool, and abdominal mass.^{5,9,12} Metastases of breast carcinoma to the omentum and mesentery has been reported, with the presence of ascites that are compatible with peritoneal carcinomatosis.¹³

The patient in our case demonstrated nonspecific symptoms of weight loss, decreased appetite, abdominal pain, and ascites 15 years after her initial diagnosis and treatment for breast carcinoma. Recognizing the range of clinical presentations for metastatic ILC to the gastrointestinal tract is imperative for early diagnosis and treatment.

Our case also highlights the potential limitations of imaging tests for diagnosing metastatic breast carcinoma. The patient’s recent CT and PET scans did not demonstrate any mesenteric or lymph node involvement. Known limitations of PET scans include the inability to recognize small masses or to differentiate between scar tissue and active tumors.¹⁴ The diffusely infiltrative nature of ILC and the absence of a well-defined margin may have contributed to the negative results of the PET and CT scans in our case.

Metastatic breast carcinoma in the gastrointestinal tract can produce a variety of radiologic and clinical presentations. As our case demonstrates, the absence of positive findings in imaging studies should not exclude the possibility of metastasis. Clinician knowledge of the atypical metastatic pattern of

invasive lobular breast carcinoma is imperative when patients with a history of ILC present with nonspecific gastrointestinal symptoms. Early recognition of mesenteric metastases is key for initiation of appropriate antineoplastic therapy.

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References

1. Berg JW, Hutter RVP. Breast cancer. *Cancer*. 1995;75(suppl S1):257-269.
2. Borst MJ, Ingold JA. Metastatic patterns of invasive lobular versus invasive ductal carcinoma of the breast. *Surgery*. 1993;114(4):637-642.
3. Arpino G, Bardou VJ, Clark GM, Elledge RM. Infiltrating lobular carcinoma of the breast: tumor characteristics and clinical outcome [published online ahead of print February 17, 2004]. *Breast Cancer Res*. 2004;6(3):R149-R156.
4. Harake MD, Maxwell AJ, Sukumar SA. Primary and metastatic lobular carcinoma of the breast. *Clin Radiol*. 2001;56(8):621-630.
5. Doyle DJ, Relihan N, Redmond HP, Barry JE. Metastatic manifestations of invasive lobular breast carcinoma. *Clin Radiol*. 2005;60(2):271-274.
6. Sastre-Garau X, Jouve M, Asselain B, et al. Infiltrating lobular carcinoma of the breast. Clinicopathologic analysis of 975 cases with reference to data on conservative therapy and metastatic patterns. *Cancer*. 1996;77(1):113-120.
7. Harris M, Howell A, Chrissohou M, Swindell RJ, Hudson M, Sellwood RA. A comparison of the metastatic pattern of infiltrating lobular carcinoma and infiltrating duct carcinoma of the breast. *Br J Cancer*. 1984;50(1):23-30.
8. Nazareno J, Taves D, Preiksaitis HG. Metastatic breast cancer to the gastrointestinal tract: a case series and review of the literature. *World J Gastroenterol*. 2006;12(38):6219-6224.
9. Schwarz RE, Klimstra DS, Turnbull AD. Metastatic breast cancer masquerading as gastrointestinal primary. *Am J Gastroenterol*. 1998;93(1):111-114.
10. Kobayashi T, Shibata K, Matsuda Y, Tominaga S, Komoike Y, Adachi S. A case of invasive lobular carcinoma of the breast first manifesting with duodenal obstruction. *Breast Cancer*. 2004;11(3):306-308.
11. Idelevich E, Kashtan H, Mavor E, Brenner B. Small bowel obstruction caused by secondary tumors [published online ahead of print August 14, 2006]. *Surg Oncol*. 2006;15(1):29-32.
12. Bamias A, Baltayiannis G, Kamina S, et al. Rectal metastases from lobular carcinoma of the breast: report of a case and literature review. *Ann Oncol*. 2001;12(5):715-718.
13. Sheen-Chen SM, Liu YW, Sun CK, et al. Abdominal carcinomatosis attributed to metastatic breast carcinoma [published online ahead of print September 19, 2008]. *Dig Dis Sci*. 2008;53(11):3043-3045.
14. Facey K, Bradbury I, Laking G, Payne E. Overview of the clinical effectiveness of positron emission tomography imaging in selected cancers. *Health Technol Assess*. 2007;11(44):iii-iv,xi-267.

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