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Childhood Obesity: Call to Action for America's Physicians

To the Editor:

The very health of the country hangs in the balance unless—and until—we reverse the epidemic of childhood obesity.

Risa Lavizzo-Mourey, MD, MBA¹

Most Americans are accustomed to gaining a few pounds from time to time. Unfortunately, more and more of us are sitting down to enjoy the bounty of summer celebrations at an already unhealthy weight. More frightening

than our own health statistics—nearly 70% of American adults are overweight—are the repercussions of our poor lifestyle choices now evident in the health statistics of our children. More than 30% of children in the United States are currently overweight or at risk of becoming so.² Among the frightening issues that confront our children unless we successfully deviate from this pattern are:

- Nearly 1 in 3 boys and 2 in 5 girls will develop diabetes in their lifetime with attendant future health risks³

- Trends in increased longevity threaten to reverse by the end of the century⁴
- Children have the potential not to outlive their parents⁵

We are in the midst of an epidemic, a public health crisis that demands national attention as a public health priority. Summer is a great time to bring attention to simple lifestyle changes, such as eating healthier and exercising more, that can make a huge improvement in patients' overall quality of life.

As national healthcare costs attributed to health complications that are ultimately the result of obesity and weight gain rise to \$120 billion annually,⁴ parents, teachers, businesses, government officials, and health professionals—particularly physicians—are stakeholders in this preventive healthcare battle. Physicians have a unique opportunity to apply their professional expertise as well as their teaching and leadership skills to further the cause. They also have many patients who may go on to act as strong advocates in support of these efforts.

Physicians are well positioned to lead the charge against childhood obesity and to make a difference in the lives of others.

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Trichotillomania: A Rare but Serious Disorder

To the Editor:

I was pleased to read the trichotillomania article by Joel R. Carr, DO, MPH, and coauthors (2006;106:647-652) in a past issue of *JAOA—The Journal of the American Osteopathic Association*. The article is a fine review of a condition that is troublesome but receives little attention.

For an alternative to selective serotonin reuptake inhibitors as a treatment option for trichotillomania, naltrexone hydrochloride is also effective. In fact, it is my first choice for patients with this clinical condition. I also suggest that, along with psychosocial therapy, every effort be made to involve patients diagnosed as having trichotillomania with the Trichotillomania Learning Center, Inc. In my experience, this resource has been helpful, especially for preadolescent and adolescent patients, and has been a significant adjunct to psychosocial therapy for patients and their families.

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Emphasizing Research in Osteopathic Medical Education

To the Editor:

During my rotations as a third-year medical student, I always asked the interns, residents, and staff physicians what it would take to match into their postgraduate programs. Time and time again they answered, without hesitation: research experience and published medical articles.

During my first 2 years as an osteopathic medical student, my professors did not emphasize the value of research and did not particularly encourage students to take advantage of the few research opportunities available. When I read the article by Alfred M. Pheley, PhD, and coauthors (2006;106:667-670) in a past issue of *JAOA—The Journal of*

the American Osteopathic Association, I was grateful to learn that this void in osteopathic medical education is being addressed. I hope the electives described in the article by Pheley and colleagues will be used to enhance and further osteopathic medicine and not merely to “keep up with the Jones’,” our allopathic counterparts.

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COM Accreditation: The Flexner Report Revisited

To the Editor:

Recent articles¹⁻³ have made alarmist references to a predicted shortage of primary care physicians in the United States. If that forecast is accurate, I am concerned about how the osteopathic medical profession will respond to the challenge. After all, approximately 59% of DOs practice in primary care specialties.⁴

Osteopathic physicians are respected by the public and our allopathic counterparts as fully licensed physicians at a level previously unheard of,^{5,6} with full practice rights in 44 countries.⁷ Osteopathic medicine is certainly expanding, with 23 colleges of osteopathic medicine (COMs) offering instruction at 26 campuses in the 2007-2008 academic year (K. Miskowicz-Retz, PhD, written communication, June 2007). Moreover, the numbers of COMs and DOs are anticipated to increase.⁸ However, the direction in which the profession expands may, ironically, take us back 100 years.

At the end of the 19th century, American medical education was dramatically different from what it is today. Many medical schools existed, but they had few admissions criteria and non-standardized curricula. Many schools were owned by physicians and other investors and had no connection to established universities.⁹ Those schools operated more for profit than education.⁹

In 1908, at the request of the American Medical Association’s Council on

Medical Education, the Carnegie Foundation for the Advancement of Teaching commissioned a survey of US and Canadian medical schools.^{10,11} Abraham Flexner, a professional educator, surveyed 155 medical schools in 18 months^{10,11} and issued a report in 1910,⁹ which has shaped American medical education into what it is today.^{10,12}

Flexner criticized the proliferation of proprietary schools, which had limited laboratory and hospital facilities and were staffed by part-time faculty. The profit motive of these schools was particularly distasteful to Flexner, who wrote, “Such exploitation of medical education...is strangely inconsistent with the social aspects of medical practice. The overwhelming importance of preventive medicine, sanitation, and public health indicates that in modern life the medical profession is an organ differentiated by society for its highest purposes, not a business to be exploited.”⁹ In response to Flexner’s critique, all for-profit medical schools were closed by 1930.¹⁰

The new Rocky Vista University College of Osteopathic Medicine (RVUCOM) in Parker, Colo, is the ultimate expression of how far the osteopathic medical profession has fallen. Now that it has received preaccreditation status by the American Osteopathic Association’s Commission on Osteopathic College Accreditation (AOA COCA), RVUCOM is on its way to becoming the first contemporary for-profit medical school—osteopathic or allopathic—in the United States in nearly 100 years.

This institution is a for-profit, limited liability corporation,¹³ and I am concerned about the potential conflicts of interest of some of the people affiliated with it. For example, the “chancellor” of RVUCOM¹⁴ is also president and chief operating officer of the for-profit American University of the Caribbean School of Medicine in Cupecoy, St Maarten, Netherlands Antilles, though he resides in Coral Gables, Fla, where he is also a real estate investor.¹⁵ He is also a board member

and treasurer of the International Association of Medical Colleges, a recently formed association of offshore colleges that aims to set up its own accreditation standards for foreign medical schools as an alternative to the Liaison Committee on Medical Education (LCME).¹⁶ In addition, one of the RVUCOM trustees serves as clinical dean for the American University of the Caribbean School of Medicine.¹⁷

It appears that COCA may be permitting what the LCME has thus far prevented—a for-profit medical school on US soil. Is this damaging precedent being set in an attempt to address a predicted primary care shortage—or to make money? It is very disturbing that COCA, under its second requirement for preaccreditation, permits the incorporation of a COM as “either a non-profit or for-profit corporation.”¹⁸

And what of the COCA standard titled “Research and Scholarly Activities,” which states, “The COM must make contributions to the advancement of knowledge and the development of osteopathic medicine through scientific research”?¹⁸ How much funding is going to be reinvested into research in a for-profit medical school? How much research and funding would a for-profit COM receive from the National Institutes of Health? Even the most modest research endeavor requires \$1 million in start-up funding, \$2 million in endowment, and 5000 to 10,000 square feet of laboratory space (J. Zhang, MD, PhD, oral communication, August 2005).

Please correct me if I have missed something, but I can find no record of any published research or funding at the for-profit Caribbean medical schools. Colleges of osteopathic medicine are already widely criticized for relying on tuition to finance operating expenses rather than research.¹⁹ For-profit ventures will only decrease the profession’s credibility in this regard. How interested are these investors going to be in the *principles* and practice of osteopathic medicine, aside from the fact that we are allowing them to enter a new profitable venture?

By virtue of our success as a small but elite group of physicians providing superior, holistic care to our patients, DOs have gained national and international recognition and credibility.⁷ Our reputation cannot be sacrificed, not only for the sake of the profession but also for the sake of our patients. The United States will need more physicians in the future, but we should not substitute quality for quantity. To retain its credibility as the guardian of the osteopathic medical profession, the AOA should take the following steps immediately:

- Establish an independent council to reevaluate COCA standards, membership, and procedures. The standards set by COCA should be at least equivalent to the standards of the LCME.
- Commission a neutral party to conduct a 21st-century survey of osteopathic medical education, including graduate medical education (GME) and continuing medical education (CME).

The University of Arizona College of Medicine, for example, recently expanded its Phoenix campus in response to the state’s increased need for physicians and to increase the number of the college’s GME programs and clinical opportunities.²⁰ In the osteopathic medical profession, however, we seem to be less concerned about GME and CME.

Opportunities in CME for COM graduates are limited and hampered by the anachronistic policies of the AOA. In September 2006, an anesthesiology grand rounds was presented at the University of Mississippi School of Medicine in Jackson on using osteopathic manipulative treatment (OMT) in postoperative pain management by the osteopathic manipulative medicine coordinator from a large COM. The AOA refused to grant category 1A CME credit to participating osteopathic physicians because the University of Mississippi School of Medicine is not an AOA-

accredited CME sponsor.²¹ So osteopathic physicians, attending a lecture on OMT given by a prominent DO, could receive category 1 credit from the AMA for the lecture, but only category 2 credit from the AOA. Only after the DOs who participated in the lecture submitted extensive, time-consuming paperwork to the Mississippi Osteopathic Medical Association were the DOs eligible to receive category 1 CME credit from the AOA’s Division of CME.

- Establish a council to represent the interests of DOs who have undergone Accreditation Council for Graduate Medical Education (ACGME) training. As the number of DO graduates matching to osteopathic GME programs declines (49% of graduates matched in 2003, while 44% matched in 2005),^{22,23} DOs who train in ACGME programs make up an ever-growing majority of this profession. In fact, the number of graduating DOs exceeds the availability of osteopathic internship and residency slots. In 2005, only 2652 AOA-approved osteopathic internship positions existed for the 2826 graduating osteopathic medical students.²³ However, there seems to be little desire among these graduates to obtain osteopathic GME: In the same year, only 1228 (44%) of 2826 DO graduates matched to osteopathic internships.²³
- Recruit members for these new councils from outside AOA committees’ standard participants. The frequent recurrence of a dozen or so names on the list of our various committees suggests the “fox guarding the henhouse” to an outside observer.

There is a difference between growth and responsible growth. Our COMs and the rest of the osteopathic medical profession should grow, but we must adhere to the strictest standards. Has COCA abrogated its responsibility? The AOA’s own written standards permit for-profit schools.¹⁸

(continued on page 277)

Although funding of scientific research has increased at COMs in recent years,^{24,25} we rely on osteopathic post-doctoral training institutions for GME.²⁶ In 1910, American medical schools were for profit, they were unaffiliated with universities, they did not require laboratory work or dissection, and they were staffed by part-time local physicians whose own training left something to be desired.⁸ Does this description sound familiar?

In 2007, the government and other payers play significant roles in regulating medicine, which was not the case in the fee-for-service turn of the century. If the osteopathic medical profession does not act aggressively to align itself with current trends, the government may step in and do it for us. It is not beyond the bounds of reason to envision a future in which DOs who underwent ACGME training and obtained allopathic board certification are converted to MDs on a nationwide scale, much like the California merger threatened to expand to other states in the early 1960s.²⁷ And if that should happen, the graduates of hastily accredited for-profit COMs may find their practice rights revoked.

It is 1910 all over again, and our response needs to be as serious as was the response of osteopathic and allopathic medical colleges' of that time, or osteopathic medicine will perish. It is ironic that now, as the osteopathic medical profession reaches its potential zenith, it is in its greatest danger of unintentional collapse.

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Editor's Notes: A response letter from Ronnie B. Martin, DO, Dean of RVUCOM, is scheduled to appear in the August 2007 issue of *JAOA—The Journal of the American Osteopathic Association*.

The chancellor of RVUCOM was shown this letter and declined to comment.

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Hope for Larger Study on Otitis Media

To the Editor:

The original contribution by Brian F. Degenhardt, DO, and Michael L. Kuchera, DO,¹ in the June 2006 issue of *JAOA—The Journal of the American Osteopathic Association* was an interesting article evaluating the efficacy of osteopathic manipulative treatment (OMT) for patients with otitis media. Drs Degenhardt and Kuchera¹ conclude, "Osteopathic evaluation and treatment was shown to be beneficial in treating 5 (63%) of 8 subjects in this cohort with documented recurrent otitis media."

It should be emphasized that the absence of a control group in this prospective experiment prohibits one from drawing any firm conclusions. Therefore, it is impossible to determine if OMT actually reduced the incidence of otitis media in this study.

In addition—given the high prevalence of allergic rhinitis and its association to otitis media²⁻⁴—any study carefully evaluating the effects of OMT on patients would need to control for other types of therapies for allergic rhinitis, such as antihistamines, intranasal corticosteroids, and mast cell stabilizers.

The study by Drs Degenhardt and Kuchera¹ lacks such controls.

I applaud the authors' efforts to study the efficacy of OMT. However, I hope they will be able to enroll larger numbers of patients in their next study.

Richard Galgano, DO
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Study on Recurrent Otitis Media: Potential Value vs Actual Value of OMT

To the Editor:

I applaud JAOA—*The Journal of the American Osteopathic Association* for highlighting original research on the application of osteopathic manipulative treatment (OMT) to commonly encountered clinical problems. However, the JAOA also has a responsibility to ensure that the studies it presents are of a high scientific quality so that its readers are not misled by erroneous conclusions.

The June 2006 issue's cover read, "Reducing recurrent otitis media with OMT," and guides readers to an original contribution by Brian F. Degenhardt, DO, and Michael L. Kuchera, DO,¹ two leading investigators in osteopathic medical research. Although the abstract and much of the paper discuss the *potential* value of OMT in reducing the morbidity of acute otitis media (AOM) in children, faults in the study's design and methodology prevent readers from determining the *actual* value of OMT in this clinical application.

The intent of the authors is laudable. However, the study suffers from numerous weaknesses that are not

addressed satisfactorily by them. The study reports on an uncontrolled, non-randomized series of 8 referred children with reported histories of recurrent AOM. We are not told how many recruited subjects were excluded from participation in the study or under which of the exclusion criteria. In addition, the authors report, "By 3 years of age, 50% of children will have had more than three episodes of AOM."^{1,2} In light of this information, it seems surprising that researchers were unable to recruit more subjects for participation in this study.

At several places in the report, the authors¹ mention that the study lasted 1 year. *Figure 2* in the report is, thus, misleading, because the label on its x-axis indicates that the study period lasted from "January 1992 to September 1993." Furthermore, the JAOA presented 13-year-old data with this study. Is this data the best that the osteopathic medical profession has had to offer on this clinical condition during the past 13 years?

In addition, the authors¹ do not present a standardized definition of AOM or recurrent AOM in their inclusion criteria. Because there is no standardized definition of these diagnoses, readers are left to wonder how the practitioners defined acute and recurrent episodes. What is one pediatrician's AOM may be another's viral respiratory infection. Even the methods of data collection were "not complete enough for us to differentiate between different types of otitis media" (eg, AOM vs otitis media with effusion), as described by the authors.¹

Although Drs Degenhardt and Kuchera refer to previous controlled trials of antimicrobials in recurrent AOM, including Teele and coauthors,³ there is no control group in their study of OMT. Why would the authors like us to believe that a weekly session of OMT for a 15-day period would amend the structural issues that might be associated with recurrent AOM over the course of 1 year? How do we define whether these subjects experienced

recurrent episodes or relapses? The study describes the primary outcome as the number of recurrences at 1-year posttreatment. Although the authors report that 5 (62.5%) of 8 subjects had no documented episode of AOM at 1-year follow-up, the follow-up in the study was incomplete for several subjects.

My interpretation of the data presented by Drs Degenhardt and Kuchera is that Subjects A, B, and E can rightly be called successes; there were no recurrences of AOM in these subjects at 1-year posttreatment. However, the remaining subjects are all potential treatment failures or outright treatment failures. Subject C was lost to follow-up after 8 months, and, thus, 4 months of opportunity for recurrence were missing from the data. Subject G had a persistent effusion at 5-months posttreatment and received systemic steroids as a result—another potential failure. Subject D was an early treatment failure at 6-weeks posttreatment. Subject F, having received antibiotics for a presumed episode of AOM at 7-months posttreatment, was another failure. Subject H had multiple recurrences. Thus, only 3 (37.5%) of 8 subjects, rather than the 5 (62.5%) of 8 claimed,¹ had a truly successful outcome at the primary endpoint—a result that is similar to that reported in the placebo arm of Teele and coinvestigators.³

Finally, in their "Comments" section, Drs Degenhardt and Kuchera attempt to compare their subjects with the placebo group from Teele and colleagues,³ which is an invalid comparison.

It is difficult to make any conclusions from an underpowered, uncontrolled, nonrandomized, and biased cohort of 8 subjects. While all of us in the osteopathic medical profession would like to believe that OMT is beneficial to our patients, we need to be cautious in how we present and interpret data from clinical trials. Drs Degenhardt and Kuchera, two of our profession's leading researchers, should be especially cautious about reporting less-

than-satisfactory data, as it risks fostering the bias already present in our profession regarding the effectiveness of OMT.

Whether OMT has any impact upon the course of recurrent AOM remains to be answered by an appropriately structured trial, which I hope the authors will conduct shortly.

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Response

I appreciate the comments put forth by Drs Galgano and Orenstein in their respective letters regarding the original contribution Dr Kuchera and I published in the June 2006 issue of *JAOA—The Journal of the American Osteopathic Association* (2006;106:327-334). An important task of physicians in this era of evidence-based medicine is to be critical of the research being presented. I appreciate their interest and motivation to directly participate in the peer critique of published manuscripts.

Considering the hierarchy of modern medical research—beginning with in vitro and animal research and progressing to double-blind, randomized controlled trials (*Figure*)—a single cohort study or a series of case reports is located in the middle of the hierarchy and has slightly more value than ideas, editorials, opinions, or individual case reports. Our June 2006 *JAOA* report focused on 8 cases that, based on reviews of patients' primary care medical records, met the criteria for recurrent otitis media established by the Agency for Healthcare Research and Quality,¹ as well as consensus state-

ments from research leaders, such as Klein and coauthors,² in the 1980s. Dr Kuchera and I originally intended for my residency research project to have a control group, but difficulties with subject recruitment in a small Midwestern town and the lack of research-oriented physicians resulted in a prospective "case series," single-cohort study, which relied on community physicians for medical diagnosis and management. There were no potential enrollees meeting the inclusion criteria who were disqualified because of the exclusion criteria. Prior to conducting our study, reports in the literature on the usefulness of manual treatments for children with otitis media were primarily limited to ideas and opinions.^{3,4}

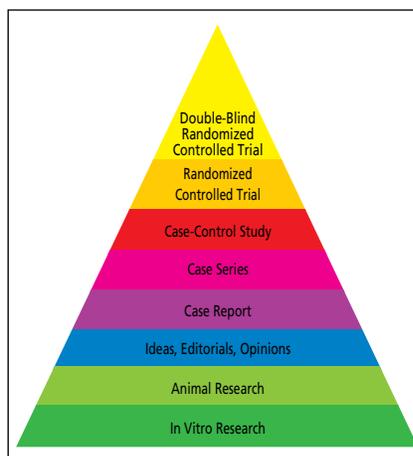


Figure. A representation of the hierarchy of medical research, depicting ascending levels of evidence by study type.

One of the main challenges in otitis media research is establishing consistent standards for diagnosis and follow-up for various forms of otitis media—not only regarding standard medical diagnostic and intervention procedures, but also regarding osteopathic structural examination and osteopathic manipulative treatment (OMT). This challenge has been identified in the literature as among several problems revealed in decades of otitis media and osteopathic medical research.⁵⁻⁷ To systematically address the biomedical, non-

musculoskeletal factors related to otitis media, a panel of experts from the American Academy of Pediatrics (AAP) and American Academy of Family Physicians (AAFP) created guidelines for the diagnosis and management of acute otitis media (AOM) a decade after our study was performed.⁸

While it seemed reasonable at the time to rely on well-trained community physicians to be independent care providers for the subjects in our *JAOA* study, Dr Kuchera and I recognized and reported as a limitation of the study that there could have been a lack of consistent standards used in the evaluation, diagnosis, and reporting of otitis media among these physicians. As a result, we recommended that this shortcoming be addressed to improve future studies. We do assume, however, that the consistency of standards of evaluation and assessment by each physician, when compared over time, would be quite high.

Although the AAP/AAFP consensus guidelines⁸ are an important step in improving the classification and management of AOM, they will not be the final solution to this problem. As far as the scientific standardization of osteopathic palpatory diagnosis and OMT for children with otitis media, such work has not yet been initiated. Thus, osteopathic medical research in this field today is at a similar stage in the scientific process to biomedical research in otitis media when it was in its infancy 40 years ago.

The protocol for our *JAOA* study consisted of the following steps:

1. Identification of children and infants who met the criteria for recurrent otitis media based on medical records from their primary care physicians
2. Structural evaluation and OMT for 3 consecutive weeks
3. At 1-year postintervention, assessment of the number of AOM episodes during that year based on phone interviews with parents (or legal guardians) and review of

patients' medical records from their primary care physicians

The data in our JAOA study were considered in three ways: as individual cases, as a group, and compared with other published research. The duration of follow-up after OMT in our study is particularly noteworthy. In a majority of intervention studies on recurrent otitis media prior to our own, follow-up was limited to the duration of the intervention (ie, the completion of a course of prophylactic antibiotics) or up to 6 months postintervention.⁹ In our study, follow-up was for 1-year post-treatment or—in the case of Subject D—until the subject underwent surgical intervention. Another subject moved to a different city, leaving no forwarding information, so the last entry on the medical record for that subject was 8 months after completion of the intervention period. In a randomized controlled trial, this subject would not be considered a success, as noted by Dr Orenstein. Yet, because the duration of follow-up for this particular case was longer than most previously reported follow-up periods,⁹ we contend that it is reasonable to consider this subject as a treatment success in a case study design.

We believe that Dr Orenstein inaccurately interpreted 2 other cases reported in our article. Current standards for the diagnosis of AOM require a history of acute onset of signs and symptoms, signs of middle-ear inflammation, and the presence of middle-ear effusion.⁸ Using these criteria, Dr Orenstein's interpretation of Subjects F and G is not accurate because neither of these subjects had an episode of AOM during the follow-up year. Furthermore, corticosteroids are still of questionable efficacy for treating children with otitis media and middle-ear effusion,^{10,11} and they are not recommended for treating patients with AOM.⁸ Because of the limitation of using unstandardized medical records, Dr Orenstein's opposing interpretation is appreciated as potentially valid, yet so is the one put forth by

Dr Kuchera and myself—further illustrating both the reported limitations of the study and the need for additional research.

By way of clarification, we would like to note that *Figure 2* in our article represents a timeline that was associated with only 1 of the study's subjects. *Figure 2* illustrates the rate of recurrence of otitis media for Subject H in the 9 months prior to the initiation of OMT and during the study's 1-year follow-up period.

Since we completed our study, there has been only one published study that begins to approach the level of rigor that Drs Galgano and Orenstein advocate. That study, by Mills and colleagues,¹² consisted of 57 subjects randomized into one of two groups—OMT with standard-of-care treatment or standard-of-care treatment only. While that study found trends that supported the use of OMT for children with recurrent AOM, it, like all studies, had limitations, including limited statistical power due to the small number of subjects enrolled.¹²

At this stage, it is important that current and future researchers learn from studies that have been performed and, subsequently, develop more rigorous research procedures. This goal can be accomplished only by building a published base of systematic observations so that potentially fertile areas of research can be identified—even if there are limitations to those observations. There are clear limitations in our JAOA report that were detailed in the article, and we urged caution about deriving any conclusions other than the need for additional research. Our hope is that the lessons learned from our pilot project might support and improve future research on the efficacy of OMT in otitis media.

The next level of research in this area has been undertaken at the direction of Karen M. Steele, DO, of the West Virginia School of Osteopathic Medicine in Lewisburg, and the staff at the Osteopathic Research Center in Fort Worth, Tex (K.M. Steele, DO, written

communication, May 2007). The research model being developed by Dr Steele's team has the potential of achieving the level of rigor that Drs Galgano and Orenstein desire and that the osteopathic medical profession deserves. Unfortunately, this prospective, randomized, blinded, and controlled clinical trial design will require funds totaling more than \$2 million—a level of funding that, until now, has been unprecedented for osteopathic manipulative research (K.M. Steele, DO, written communication, May 2007).

I would like to remind readers that the scientific process involves a *progressive series of steps* before a high level of certainty about any particular hypothesis can be achieved. Studies on the efficacy of OMT remain in their infancy and will have to progress sequentially through the lower levels of research before the appropriate resources can be obtained to reach more definitive conclusions about osteopathic manipulative medicine.

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Reported Prevalence Rates of Somatic Dysfunction Raise an ... Heel?

To the Editor:

In their December 2005 study, John C. Licciardone, DO, MBA, and colleagues, indicated that they found evidence of somatic dysfunction in 31% of subjects (*J Am Osteopath Assoc.* 2005;105:537-544). I have been practicing osteopathic medicine for 35 years. I am board certified in osteopathic family medicine and surgery, osteopathic manipulative medicine, and psychological evaluation and treatment. And yet, my experience (albeit anecdotal) disagrees with the findings of these researchers.

Andrew Taylor Still, MD, DO,¹ said that there is an element of somatic dysfunction in every illness: "disease is the result of anatomical abnormalities followed by physiological discord." I agree and have based my successful practice of osteopathic medicine on this tenet.

The tenets of osteopathic medicine further state that structure governs function.² This principle explains why it is so important for osteopathic physicians to recognize the importance of, for example, leg length disparity. I have found this particular kind of somatic dysfunction present in approximately 95% of the patients I see with all manifestations of illness.

I find that a simple hard rubber lift inserted into the heel of the patient's shoe on the short leg side can balance the pelvis and level the sacral base on which the spine rests. If osteopathic physicians do not make this determination on the first visit, I believe that they are not truly practicing bona fide osteopathic medicine. (Incidentally, in 95% of my patients with this condition, the left leg is affected.) The human spine must be balanced to maintain health.

Heel-lift therapy to level the sacral base, straighten the spine, and achieve proper blood supply to the organs is often the best way to give patients the best chance at maintaining health.

Dr Still³ goes on to indicate that the rule of the artery is supreme, meaning that there must be appropriate blood supply to all the organs. This optimal state is not possible concurrent with a misaligned spine.

My patients come to me for their medical-surgical problems. I operate a comprehensive diagnostic treatment center. We are capable of performing over 65 different diagnostic tests on site, many of which are available to most patients only in a hospital on an out-patient basis. On their first visit, patients receive a thorough osteopathic spinal balance examination. If I diagnose a patient with short leg syndrome, I provide him or her with lift therapy, OMT during each visit, and treatment for the chief complaint.

For the patients described, I prescribe a monthly treatment plan. First, these patients undergo routine testing for any chronic conditions (eg, complete blood count, ultrasonography). Second, to relax and prepare patients' muscles, tendons, and ligaments for osteopathic manipulative treatment, I provide a short preparatory treatment for them using an anatomotor massage and traction table. After patients have received 15 minutes of treatment with the anatomotor, I enter the examination room to reevaluate and quickly manipulate approximately 10 body regions. Finally, I devote adequate time to speaking with patients to make certain I have appropriately addressed all of their medical-surgical complaints.

If you will notice, I said that I treat approximately 10 body regions in all patients. Why? It is simple: treating only one or two areas of the body is foolish because the human body is an interrelated unit.² Somatic dysfunction in one body region affects the entire organism, causing somatic dysfunction in all regions of the body.

I have practiced in South Bend, Ind,

in this manner for 35 years. I believe that it is a clear testimony to my adherence to osteopathic principles that it generally takes new patients 4 months to move from the waiting list to receiving full medical care in my practice. One third of our patients travel from nearby states to be seen by me. Practicing medicine according to the tenets of Dr Still, I have helped thousands of patients over the years.

I believe that my success is rooted primarily in three essential tenets of osteopathic medicine:

- In every illness, there is an element of somatic dysfunction
- Somatic dysfunction is best treated via osteopathic manipulative medicine
- The rule of the artery is supreme

It is just that simple.

Donald E. Kotoske, DO
South Bend, Ind

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