Osteopathic Manipulation: Promise for Infantile Colic

To the Editor:

As an osteopathic pediatrician who has used osteopathic manipulative treatment for patients with infantile colic, it was a pleasure to read about the research of Hayden and Mullinger1 that was summarized by Michael A. Seffinger, DO,2 in the May installation of “The Somatic Connection.”

Hayden and Mullinger1 focused on the use of osteopathic manipulation by osteopaths in the United Kingdom to treat infants with symptoms of infantile colic. “The Somatic Connection”2 reported that preliminary findings led these researchers to conclude that osteopathic manipulation can help reduce infantile colic symptoms.

It should be noted that there was a problem with the design of the study by Hayden and Mullinger.1 The infants in the study were eligible for osteopathic manipulation if they were no older than 12 weeks, and they were treated for 4 weeks1—implying that some of them were 16 weeks of age at the completion of the treatment period. In the normal course of events—with or without treatment—infantile colic usually resolves spontaneously by 12 weeks of age.3-5 Thus, the improvements in infantile colic symptoms observed by Hayden and Mullinger1 cannot be attributed to osteopathic manipulation with certainty.

When studying treatment outcomes in the pediatric population, it is necessary to take into account changes that normally occur with physiologic and psychologic maturation. While I strongly encourage Hayden and Mullinger1 to continue their research to provide evidence-based data about the effects of osteopathic manipulation on patients with infantile colic, I suggest that they consider the above information when designing new studies.

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References

Debt Control for Young DOs

To the Editor:

In several issues of JAOA—The Journal of the American Osteopathic Association,
readers have shared their concerns about rising debt levels for graduates of colleges of osteopathic medicine (COMs).1-6 These concerns are highly appropriate and are also shared by many COM administrators—some of whom have also taken bold action to suppress rates of tuition increase and expand need-based financial aid in their efforts to reduce borrowing by osteopathic medical students.4,5

I can report that osteopathic medical students at Philadelphia (Pa) College of Osteopathic Medicine (PCOM) have experienced 5 consecutive years of reduction in the percentage of tuition increases. Tuition for the 2008-2009 academic year at PCOM is increasing 3%—far less than the increase in the college’s operating expenses. Moreover, need-based financial aid is at the highest level in PCOM’s history. Financial aid packages for the new academic year include institutional grants as high as $10,000. In fact, last year, the college’s Board of Trustees decided to allocate proceeds from a land sale to need-based student grants.7

In his letter, Chadd K. Kraus, MPH, OMS II,3 implied that lower levels of debt for graduates of allopathic medical colleges reflect greater institutional support at those institutions than at our COMs. However, an analysis of self-reported median education debt of osteopathic and allopathic medical students from 1999 to 2007 shows a 65% increase in debt for allopathic medical students during that period,8 compared with a 44% increase in debt for osteopathic medical students. At PCOM, we are proud to place debt reduction at the forefront of our strategic goals. We also appreciate the opportunity to take part in the ongoing JAOA conversation about lowering levels of indebtedness for osteopathic medical students.

Matthew Schure, PhD
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References

One Hundred Thousand Cases of Influenza With a Death Rate of One-Fortieth of That Officially Reported Under Conventional Medical Treatment

To the Editor:

I would like to voice my reservations concerning the famous 1920 article by Kendrick Smith, MD, DO,1 that reported the success of the osteopathic approach to the influenza pandemic of 1918.

In medical school and in various professional lectures I have attended, Dr Smith’s article1 has been touted as near-certain evidence that one of the mechanisms of osteopathic manipulative treatment (OMT) is the stimulation of lymphatic flow, implying the provocation of improved immune function. In his report,1 Dr Smith’s basic tenet was that the stimulation of immunity through OMT saved lives in the face of a tragic event—the influenza pandemic of 1918 (ie, “Spanish flu”)—for which there was no cure.

The 1920 article, as published in JAOA—The Journal of the American Osteopathic Association,1 was derived from a lecture delivered at the Annual Convention of the American Association of Colleges of Osteopathic Medicine in October 1919. The article has many problems when evaluated by today’s rigorous standards for epidemiologic research.

The etiologic agent of the 1918 influenza pandemic was an orthomyxovirus designated as H1N1. At the time of the pandemic, however, there was little (if any) understanding of viruses. In fact, it was widely believed that Pfeiffer’s bacillus (a gram-negative bacterium now known as Haemophilus influenzae) was the etiologic agent.2 Without the correct pathogen identified, an accurate diagnosis of the disease could not be made. Modern investigations of outbreaks in which firm diagnosis cannot be made are typically classified into likelihood of disease (ie, definite, probable, and possible cases), and analyses are made based on these classifications. Dr Smith1 does not mention how the diagnoses of influenza were confirmed in the cases he cites. He also fails to mention if the patients were categorized by probability of disease based on symptoms for analysis.

The influenza pandemic of 1918 was characterized by three distinct waves of disease in the United States. The first wave of the pandemic took place in the spring, the second wave occurred in the fall, and the final wave took place during the winter and extended into early 1919.3 The virulence of the disease in the spring of 1918 was rather mild when compared...
with the two subsequent waves. After some moderate antigenic drift, early exposure to the virus in the spring seemed to confer some protective effects when the virus reappeared in subsequent seasons. Dr Smith does not note which wave(s) infected the patients in his report. Nor does he comment on the history of his patients vis-à-vis the early semiprotective spring exposure. I believe these omissions may represent a noteworthy confounding factor.

Yearly influenza is notable for increases in mortality at the extremes of age. The 1918 influenza pandemic, however, produced its greatest mortality among individuals whose ages ranged from 20 to 40 years. It has been postulated that individuals who were older than 40 years may have been exposed to an earlier influenza strain that conferred partial immunity against the pandemic 1918 strain, resulting in a lower risk of mortality for that demographic group. In his article, Dr Smith does not mention patient age. Theoretically, osteopathic physicians practicing in 1918 and 1919 could have been treating mainly older patients who previously received partial immunoprotection from earlier influenza strains while allopathic physicians may have had a greater proportion of patients who were younger and had not received such immunoprotection. It is possible that this is one explanation for the different mortality rates of patients treated by osteopathic versus allopathic physicians.

The details of the data-accumulation process used by the AOA to study the 1918 influenza pandemic may have been lost to time. Dr Smith reported that 2445 osteopathic physicians without predetermined standards—let alone a clear mechanism for diagnosing the disease in question—would make for inaccurate data.

The conclusions drawn from Dr Smith’s observations, though intriguing, can be explained by the confounding factors I have detailed above. I would like to propose that the methods used in the original AOA report be determined and published. The publication of this information would have medical and historic merit. Furthermore, I believe that the AOA’s data from the 1918 pandemic should be reanalyzed by today’s more stringent statistical methods—that is, if the data can be found. Until then, I believe that we need to consider the “one-quarter of 1%” statistic an interesting, though mainly anecdotal, historic observation.

Currently, most public health authorities believe that another influenza pandemic is inevitable. Remaining unknown, however, is the influenza strain or subtype that will be responsible for this pandemic—and, of course, the event’s timing. The most likely candidate for pandemic potential in the near future remains the avian influenza strain H5N1 (ie, “bird flu”).

Thus, appreciating that the study published by Dr Smith is critically flawed, and by way of preparing for the possible pandemic outbreak of H5N1, I challenge the osteopathic research community to initiate protocols necessary to begin studying the effects of OMT in patients who are exposed to or infected with H5N1. Nothing would vindicate the observations of our osteopathic predecessors better than replicating studies of H1N1 under similar conditions (should we be able to determine them) and getting similar results for H5N1.

Because of the lack of scientific standards for Dr Smith’s now 88-year-old editorial, I believe that it is our responsibility as a profession to stop referring to it as though it remains a work with scientific merit. I recently refereed a research proposal that cited Dr Smith’s article as a legitimate piece of scientific research. After brief reflection, I realized that I, too, was guilty of citing Dr Smith’s work in an article that was published in 2000. So, if I could modify the statement that I originally made in that article:

Smith reports that patients that received OMT had a mortality rate of 0.25% as compared to the 5% for those that did not receive manipulative treatment.

I would reword the statement as follows:

In a noncontrolled observational study that lacked today’s rigorous scientific standards, Smith reports that patients that received OMT had a mortality rate of 0.25% as compared to the 5% for those that did not receive manipulative treatment.

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References
Osteopathic Certification Evolving Into a Continuous Certification Model

To the Editor:

In reading the article by Ronald E. Ayres, DO, and co-authors1 in the March issue of JAOA—The Journal of the American Osteopathic Association, I note that there is a disappointingly low number of certificates awarded by osteopathic medical specialty boards for anatomic pathology (0%-1%). Furthermore, in the same issue of the JAOA, the article by Diane N. Burkhat, PhD, and Terri A. Lischka, BS2 did not provide any discussion of pathology residency programs approved by the AOA.

Where does the field of pathology fit into the osteopathic medical profession? What kind of message does this apparent lack of support for this medical specialty by the AOA send to the rest of the medical community and the public?

References


Responses

We thank Jack S. Moskowitz, DO, for his inquiry regarding the number of board certifications and osteopathic residency training programs in pathology. The demand for certification by the American Osteopathic Association (AOA) is driven by the availability of training programs, among other factors.

Dr Moskowitz’s concerns center on the availability of training programs, which ultimately lead trainees into the certification process. Because the primary purview of the AOA Bureau of Osteopathic Specialists is to oversee the certification process—as opposed to creating and developing residency programs—Dr Moskowitz’s inquiry would be best answered by the AOA Council on Postdoctoral Training (COPT) and the AOA Program and Training Review Council (PTRC).

The COPT and PTRC manage, shape, and approve the development of and policies for existing and proposed residency programs in various specialties of the osteopathic medical profession.

Ronald E. Ayres, DO
Chair
American Osteopathic Association Bureau of Osteopathic Specialists
Chicago, Ill

I would also like to thank Jack S. Moskowitz, DO, for his letter about board certifications and osteopathic residency training programs in pathology.

It is true that there are no pathology residency training programs that are approved by the American Osteopathic Association (AOA), and there have been no such programs for many years. Nevertheless, the AOA Program and Training Review Council (PTRC) stands ready to assist any facility that indicates a desire to start an osteopathic pathology residency training program.

Because there are currently no AOA-approved pathology residency programs, the PTRC has been extremely lenient regarding requirements for basic documentation of equivalent training in pathology programs accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Under AOA Resolution 42 (A/2000), trainees in ACGME-accredited pathology residency programs are given almost carte blanche acceptance of their training as meeting requirements for osteopathic medical education. Thus, if a graduate of an osteopathic medical school is in an ACGME-accredited pathology residency training program, it is essentially guaranteed that he or she will be able to sit for the AOA certification examination in that specialty.

I support the idea of AOA-approved osteopathic pathology residency programs, but until a facility comes forward to sponsor such a program, this will continue to be a hole in our graduate medical education programming.
The article that Terri A. Lischka, BS, and I wrote on osteopathic graduate medical education in the March issue of JAOA—the Journal of the American Osteopathic Association (2008;108:127-137) was designed to give readers an overview of postdoctoral training in the osteopathic medical profession. Thus, we purposely did not provide a discussion of specific specialties.

The number of pathology residency training programs approved by the American Osteopathic Association (AOA) has not increased in recent years, as indicated in Table 5 of our article. At the present time, there is only one AOA-approved fellowship program available for training in forensic pathology.

I would challenge Dr Moskowitz and other osteopathic physicians who may be certified in pathology by the American Board of Medical Specialties to get more personally involved in this issue. They could help develop more osteopathic residency training programs in pathology—and they could help gain AOA-approved slots in existing Accreditation Council for Graduate Medical Education-accredited residency training programs in pathology.

One motivated osteopathic physician can make a difference!

Diane Burkhart, PhD  
Director of Education  
American Osteopathic Association  
Chicago, Ill

In his letter to the editor, Jack S. Moskowitz, DO, expresses concern regarding the “disappointingly low number of certifications awarded by osteopathic medical specialty boards for anatomic pathology.” Of course, it is important to understand that the number of certifications in any specialty is a reflection of the number of osteopathic residents completing programs in that specialty.

For a long time, the American Osteopathic Association (AOA) has not had any approved residency training programs in anatomic pathology. This lack of programs, however, does not reflect a lack of interest or desire on the part of the AOA or the Council on Postdoctoral Training (COPT) in offering these programs to its residents. The COPT has recently encouraged and assisted the American Osteopathic College of Pathologists (AOCP) in rewriting and updating its “Basic Standards for Residency Training in Anatomic Pathology and Laboratory Medicine.” These updated standards have since been approved by the COPT, the AOA Bureau of Osteopathic Education, and the AOA Board of Trustees. The “Basic Standards for Residency Training in Anatomic Pathology and Laboratory Medicine” are available for program development—as they have been for several years.

The lack of residency training programs in anatomic pathology is the result of a lack of program applications from osteopathic training institutions, as well as an apparent lack of energy and enthusiasm from the AOCP itself in stimulating interest within the hospitals where its members are represented. There are a number of graduating osteopathic medical students who desire pathology specialties and who enter pathology residencies in allopathic programs accredited by the Accreditation Council for Graduate Medical Education. These residents often request AOA certification of their allopathic pathology training.

As chair of the AOA COPT, I can report that we would prefer to support our own osteopathic pathology residency programs. To accomplish this task, however, increased support needs first to come from within the specialty (including the specialty college) to stimulate and encourage growth of pathology training programs. Then, support needs to develop at the training hospital level, with the submission of pathology program applications to the AOA Program and Training Review Council.

The AOA supports all specialties, as osteopathic medicine is a full-service profession. We hope to see new pathology residency applications and programs soon. I invite all interested readers to assume the responsibility of assisting us in this endeavor.

Michael I. Opipari, DO  
Chair  
American Osteopathic Association Council on Postdoctoral Training  
Chicago, Ill

I wish I could respond to the letter of Jack S. Moskowitz, DO, by reporting that the American Osteopathic Association (AOA) and the osteopathic medical profession have supported the pathology specialty in the past and have demonstrated that they will support the pathology specialty in the future. Unfortunately, osteopathic pathology has historically been a “stepchild” of osteopathic medicine.

There have always been few residency programs in pathology approved by the AOA, and after the 1999-2000 academic year—as a result of several factors—the last AOA-approved residency program in pathology closed.1

From my experience as a pathology program director and from my conversations with other program directors, I know that factors contributing to the closing of these residency programs included removal of funding for these programs by their associated osteopathic hospitals and colleges of osteopathic medicine; decreases in federal funding for residencies in general; and a marked decrease in interest by osteopathic medical students in seeking osteopathic pathology residencies.

The reality is that program slots accredited by the Accreditation Council for Graduate Medical Education (ACGME) have always been numerous and available to osteopathic medical students. As a consequence, our students preferentially gravitated to those programs instead of the AOA-approved programs—when available.2 In addition, the AOA-approved pathology residency programs were most often located in small community hospitals. What osteo-
pathic medical student would want to go into that sort of program when he or she could be in a large university program and obtain a higher-quality education?

In regard to professional support for osteopathic pathologists after they complete their ACGME-accredited residency programs, there is a pathway for AOA board certification of the anatomic pathology specialty. However, the AOA has made it extremely difficult for pathology residents who train in ACGME-accredited programs to obtain osteopathic certification. The AOA still mandates that pathology residents take an AOA-approved clinical/rotating/transitional internship before beginning their ACGME-accredited pathology residency. This mandate may not have mattered much several years ago, when the American Board of Pathology (ABP) also required a clinical year for residents in ACGME-accredited programs. However, now that the ABP has decreased the term of residency from 5 years to 4 years, few osteopathic medical students are willing to take the AOA-required transitional internship and incur additional debt during their residency years.

As the chair of the American Osteopathic Board of Pathology (AOBP) and as a former president of the American Osteopathic College of Pathologists (AOCP), I have witnessed declining numbers of DO pathologists seeking certification from the AOBP and declining membership in the AOBP. These declines have resulted in financial problems for the AOBP. However, our board is currently approaching all of the program directors of ACGME-accredited pathology residencies to let them know about the certification available from the AOBP, and we are asking them to inform the DOs in their programs about the AOBP option for certification. Furthermore, the AOBP is currently working with the AOA, the AOCP, and the Bureau of Osteopathic Specialists to try to at least streamline the process of getting ACGME-accredited pathology residency programs approved for those DO pathology residents who wish to pursue osteopathic certification.

I can only hope that residents such as Dr Moskowitz decide to seek osteopathic certification and come to work with the AOBP in revitalizing the osteopathic medical profession.

Mary Jo Robinson, DO
Chair
American Osteopathic Board of Pathology
Chicago, Ill

References

Too many physicians still view disease solely in its limited aspects as a malevolent imposter intruding upon and destroying the health of man.

George W. Northup, DO
Osteopathic Medicine: An American Reformation (1966)
Corrections
The JAOA deeply regrets several typographic errors that appeared in the following June article:


The changes detailed below were made to the full text (http://www.jaoa.org/cgi/content/full/108/6/297) and Adobe Portable Document Format (http://www.jaoa.org/cgi/reprint/108/6/297) versions of this piece online:

- **Page 298**—In the last paragraph of the first column, the ranking methodology used for the study should have been described as follows: “Using data from July 1, 2005, to July 1, 2006—and with Michigan as a comparator—the top ten states to gain retirement-age population were ranked in Table 1 according to the ratio of certified primary stroke centers to population served aged 65 years and older as 62.75 per 1000. Likewise, in Table 2, rankings are provided for these states according to the ratio of adult level I trauma centers for the demographic group.” The original print publication incorrectly stated that: “the top ten states to gain retirement-age population were ranked according to magnitude of absolute increase in population growth as well as by percent change.”

- **Page 299**—The word “New” should not have appeared in the column heading “Projected Need for New CFSCs” in Table 1.

- **Page 301**—The third sentence of the second paragraph should have appeared as: “Michigan ranks third with 76 per 1000.” The original article mistakenly reported the ratio of certified primary stroke centers to citizens aged 65 years and older as 62.75 per 1000. In addition, the second sentence of the third paragraph should have read as follows: “Eleventh-ranked Arizona had two certified primary stroke centers, serving a total of 354,000 retirement-age patients as of 2005.” The original article mistakenly reported this patient population as 354.

- **Page 302**—The word “New” should not have appeared in the column heading “Projected Need for New LITCs” in Table 2.

In addition, the AOA Department of Quality and Research regrets two errors that appeared in the following Osteopathic Manipulative Medicine/Osteopathic Principles and Practice abstract, which was published in the August issue of the JAOA:


The institutional affiliation was incorrectly shown as WVSOM (West Virginia School of Osteopathic Medicine) in Pomona, Calif, rather than WesternU/COMP (Western University of Health Sciences College of Osteopathic Medicine of the Pacific) for the authors listed. The Department of Quality and Research deeply regrets this error.

The change detailed above will appear in the official program for the 52nd Annual AOA Research Conference, which will take place from Sunday, October 26, to Tuesday, October 28, during the AOA’s 113th Annual Convention and Scientific Seminar in Las Vegas, Nev.

The theme of this year’s conference is “Osteopathic Research: Advancing A.T. Still’s Vision.” For more information on the Annual Convention and Scientific Seminar, please see the DO-Online Web site (http://www.do-online.org). ♦