THE AAO

JOURNAL

A Publication of the American Academy of Osteopathy

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The mission statement of the American Academy of Osteopathy is to teach, explore, advocate, and advance the study and application of the science and art of total health care management, emphasizing palpatory diagnosis and osteopathic manipulative treatment.

TABLE OF CONTENTS

Shared Vision, Then & Now 4
by Raymond J. Hruby, D.O., FAAO

Letter to the Editor 4

Instructions for Authors 5

Message from the Executive Director 6
by Stephen J. Noone, Executive Director

Case History; Anatomy, Asthma, and Dusautonomia 8
by Elizabeth C. Sanders, OMM Fellow, SEUHS-COM

New OMM Residency-Plus One 9
by Michael Kuchera, D.O., FAAO

Patient Education is Vital to Osteopathy's Future 10
by Laurie Beth Jones

Dr. Korr Speaks to Rocky Mountain Academy 11

Primary & Secondary Respiration Part I 12
by Robert P.Lee, D.O.

Integrating Osteopathic Medicine Into the Second 100 Years 18
by Judith A. O'Connell, D.O., President

AOA/Burroughs Welcome Resident Leadership Award 19

1992 Golden Ram Society Continues to Grow 20

Letter to the President 21

How Osteopathy Was Evolved 22
by A.T. Still

Scott Memorial Lecture: More than Mud, Mules & Manipulation 24
Michael L. Kuchera, D.O., FAAO

Letter to A.T.Still 28
by Raymond J. Hruby, D.O., FAAO

UAAO Emphasizes Preceptor Program 29
by Elizabeth C. Sanders, OMM Fellow, SEUHS-COM

Obituary: Dr. A. Hollis Wolf 30

Classified Ads 30

Calendar of Events 31

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The AOA and AOA affiliate organizations and members of the Academy are entitled to a 20% discount on advertising in this Journal.

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From the Editor

SHARED VISION, THEN AND NOW

I like to read the earlier writings in the field of osteopathic medicine—old textbooks and journal articles, especially those written by people who were students of **Andrew Taylor Still**. This is very educational because, by getting a closer to Doctor Still through his writings and those of his students, I feel I have an opportunity to understand a little more about the true nature of Osteopathy.

But I am also struck by the great amount of spirit and enthusiasm shown by Doctor Still and the early practitioners of osteopathic medicine. They weren't just going to work every day, they were living their dream. They had a vision, and what's more, they had a shared vision. Shared vision is crucial to any endeavor. Without it no project can do much better than survive; it certainly does not grow and develop.

F. P. Millard, D.O., was a student of Doctor Still and a pioneer in the early days of Osteopathy. In his book Practical Visions, he spoke of Still's vision for osteopathy: "Doctor Still had a vision, away back in the time when the therapeutic art was confined the the older school, and we possibly never will appreciate the great difficulties he encountered in launching a new school, absolutely opposed in every way to the older school. Yet he stood firm and never weakened in his great effort to present to the world a scientific truth that will live throughout the ages." Later on he says: "This vision was of such a practical nature that it brought conviction in his own mind, and apparently it lingered in his mind in the form of an outline that stood before him day after day, like a program that requires fulfilling in order to be complete and satisfactory."

Osteopathy needed a shared vision then, and it continues to need one now. The Academy has taken the first steps toward refining its vision by creating a mission statement, and a long range plan to carry out its mission. The mission statement reads as follows: "The mission of the American Academy of Osteopathy is to teach, explore, advocate, and advance the study and application of the science and art of total health care management, emphasizing palpatory diagnosis and osteopathic manipulative treatment."

But this mission cannot be completely realized unless we all share in the vision it creates. As **Peter Senge** states in his book, The Fifth Discipline, "A vision is truly shared when you and I have a similar picture and are committed to one another having it, not just to each of us, individually, having it. When people truly share a vision they are connected, bound together by a common aspiration. Personal visions derive their power from an individual's deep caring for the vision. Shared visions derive their power from a common caring. In fact, we have come to believe that one of the reasons people seek to build shared visions is their desire to be connected in an important undertaking."

Osteopathy was an important undertaking for Doctor Still and his early students. It is certainly a most important undertaking in our time. Are we ready to share the vision? ■

LETTER TO THE EDITOR

I read with interest "Characterization of the Cranial Rhythmic Impulse in Healthy Human Adults." It struck me as I read the article that the slow rate of the CRI that they recorded in this study may have been related to the level of consciousness or state of relaxation of the subjects. Other observes have noted medical students often demonstrate a slow CRI. After recovering from test taking, their rates increased.[1]

Neil Lundberg's experiments recorded intracranial pressure variations that were about four times per minute. His subjects were anesthetized, undergoing neurosurgery.[2] **Howard Scalone, D.O.**, anesthesiologist at Eastmoreland Hospital in Portland, Oregon, has observed a variation in the rate of the CRI according to the depth of anesthesia (unpublished). Occasionally, he recorded a rate of 1-2 per minute in stage IV anesthesia. Of further interest, the amplitude seemed to be extremely large allowing the untrained to palpate it readily. The extension phase was exceedingly prolonged.[3]

The rate and quality of the CRI can be used as an estimation of the subject's level of health, in my experience. Using a larger population, or one that is not under ongoing stress (a difficult population to find) may produce different results.

Another interesting aspect of this study is the rate of the CRI during and after the still point. The reduced rate following the still point also implies that the rate may partially be dependent upon the level of relaxation/state of consciousness of the subject.

I am excited by the direction of this research and applaud further efforts. ■

Robert Paul Lee, D.O.
Osteopathic Center of the Four Corners
Osteopathic Medicine and Acupuncture
Durango, CO

1. Various conversations with members of the SCTF, 1988.
2. Lundberg, Contagious recording and control of ventricular fluid pressure in neurosurgical practice, Acts a Psych et Neurol Seandl, 149:36, 1960.
3. Scalone, H., personal conversations, 1988.

Instructions for Authors

The American Academy of Osteopathy (AAO) Journal is intended as a forum for disseminating information on the science and art of osteopathic manipulative medicine. It is directed toward osteopathic physicians, students, interns and residents, and particularly toward those physicians with a special interest in osteopathic manipulative treatment.

The AAO Journal welcomes contributions in the following categories:

Original Contributions
Clinical or applied research, or basic science research related to clinical practice.

Case Reports
Unusual clinical presentations, newly recognized situations, or rarely reported features.

Clinical Practice
Articles about practical applications for general practitioners or specialists.

Special Communications
Items related to the art of practice, such as poems, essays and stories.

Letters to the Editor
Comments on articles published in The AAO Journal or new information on clinical topics.

Professional News
News of promotions, awards, appointments and other similar professional activities.

Book Reviews
Reviews of publications related to osteopathic manipulative medicine and to manipulative medicine in general.

Note: Contributions are accepted from members of the AOA, faculty members in osteopathic medical colleges, osteopathic residents and interns and students of osteopathic colleges. Contributions by others are accepted on an individual basis.

Submission
Submit all papers to Raymond J. Hruby, DO, FAAO, Editor-in-Chief, University of New England, 11 Hills Beach Road, Biddeford, ME 04005.

Editorial Review
Papers submitted to The AAO Journal may be submitted for review by the Editorial Board. Notification of acceptance or rejection usually is given within three months after receipt of the paper; publication follows as soon as possible thereafter, depending upon the backlog of papers. Some papers may be rejected because of duplication of subject matter or the need to establish priorities on the use of limited space.

Requirements for manuscript submission:

Manuscript
1. Type all text, references and tabular material using upper and lower case, double-spaced with one-inch margins. Number all pages consecutively.
2. Submit original plus one copy. Please retain one copy for your files.
3. Check that all references, tables and figures are cited in the text and in numerical order.
4. Include a cover letter that gives the author's full name and address, telephone number, institution from which work initiated, and academic title or position.

Computer Disks
We encourage and welcome computer disks containing the material submitted in hard copy form. Though we prefer Macintosh 3-1/2" disks, MS-DOS formats using either 3-1/2" or 5-1/4" discs are equally acceptable.

Illustrations
1. Be sure that illustrations submitted are clearly labeled.
2. Photos should be submitted as 5" x 7" glossy black and white prints with high contrast. On the back of each, clearly indicate the top of the photo. Use a photocopy to indicate the placement of arrows and other markers on the photos. If color is necessary, submit clearly labeled 35 mm slides with the tops marked on the frames. All illustrations will be returned to the authors of published manuscripts.
3. Include a caption for each figure.

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1. References are required for all material derived from the work of others. Cite all references in numerical order in the text. If there are references used as general source material, but from which no specific information was taken, list them in alphabetical order following the numbered journals.
2. For journals, include the names of all authors, complete title of the article, name of the journal, volume number, date and inclusive page numbers. For books, include the name(s) of the editor(s), name and location of publisher and year of publication. Give page numbers for exact quotations.

Editorial Processing
All accepted articles are subject to copy editing. Authors are responsible for all statements, including changes made by the manuscript editor. No material may be reprinted from The AAO Journal without the written permission of the editor and the author(s). ■

Writing is easy
All you have to do is stare at a blank sheet of paper until drops of blood form on your forehead.
— Gene Fowler

Message From The Executive Director

Academy Holds Successful Convention

Congratulations to Program Chairman **Stephen Blood** for organizing and executing a superb Convention in San Diego! The attendance at the Academy's lectures was impressive and the topics obviously attracted an excellent cross section of physicians registered for the AOA's Convention. From a staff perspective, it was a distinct pleasure to work with Dr. Blood. He has set a standard which his successors will find a challenge to follow!

Attendance was higher than in recent years. The AOA reported a pre-registration of 92 Academy members and an on-site registration of 32 additional physicians. Surely, the AAO's share in convention revenues will increase significantly this year. Thanks to all of you who responded to our appeals to register as an Academy member at the Convention this year!

The Academy's Structural Consultation and Treatment Service continues to be a popular service to conventioneers. This year the staff documented a total of 171 treatments provided by 50 volunteer Academy members. This is a significant increase over prior years. We compliment Chairman **David Musgrave** and his committee members on their dedication to this service and we thank all of the volunteers who responded to the call for assistance!

The Academy leadership also was active during the Convention. The Board of Trustees met on Saturday, Sunday and Wednesday. Sixteen AAO Committees took the opportunity to meet during Convention week: Ad Hoc Federal Regulation of OMM; Ad Hoc Strategic Planning; College Assistance; Constitution and Bylaws; Education; Educational Standards and Evaluation; Fellowship; Hospital Assistance; Louisa Burns; Membership; National/International Professional Contacts; Nominating; Osteopathic Medical Economics and its sub-committees; Publications; Task Force on Postdoctoral Affiliation; and Undergraduate Academies. I continue to be impressed at the level of commitment on the part of the AAO leadership to accept the responsibilities of service to the Academy. You all are making significant contributions to the promotion of Osteopathy, both within the profession and to the public at large. As staff we look forward to the continuing challenge to implement the decisions made by the Board of Trustees and committees.

AOBSPOMM Certifies Six Candidates

On November 1st the American Osteopathic Board of Special Proficiency in Osteopathic Manipulative Medicine tested six physicians and ruled that they had successfully completed the written, oral and practical examinations. AOBSPOMM Chairman **Anthony Chila** has notified these D.O.s and will forward their names to the AOA's Board of Trustees for final approval:

Joel A. Berenbeim, D.O. of Lakewood, CO

James A. Carlson, D.O. of Knoxville, TN

Joel B. Cooperman, D.O. of Denver, CO

David C. Eland, D.O. of St. Louis Park, MN

James A. Kneebone, D.O. of Brunswick, ME

Charles B. Schaap, Jr., D.O. of Englewood, CO

Congratulations to these newly certified Academy members! They join 126 other osteopathic physicians nationwide who can proudly claim certification in osteopathic manipulative medicine.

Board of Trustees Highlights

The AAO Board of Trustees formally voted to support President **Judith O'Connell** and AAO members **Viola Frymann** and **Michael Patterson** for their active participation in the September meeting at the National Institutes for Health. You will recall from early reports that NIH had convened 110 representatives from a variety of disciplines to study the promotion of research into medical practices which are generally outside the usual NIH funding priorities. Dr. O'Connell reported that she has been selected to serve on an NIH committee to compile the recommendations from the September meeting into a formal, final proposal for implementation. Dr. O'Connell also reported on a meeting with AOA President **Edward Loniewski**, President-elect **Lawrence Bouchard**, and Executive Director **Robert Draba** at which she summarized the events which led to the Academy's participation in the NIH meeting.

The entire AAO Board attended the AOA's Practice Affiliate Leadership Conference in San Diego. Participants included the AOA's Board of Trustees and leaders from the 22 practice affiliates within the osteopathic profession. AAO President O'Connell challenged the group in her presentation by asking the question: *Is the osteopathic profession committed to the basic principles of osteopathy?* Among other things, in her remarks she cited concerns expressed by students and D.O.s in training that they want more expo-

sure to the application of osteopathic principles and practice but find difficulty in getting it. While the ensuing discussion by participants was disappointing, Dr. O'Connell did receive contacts and supportive comments from individuals and at least one practice affiliate following the conference.

President Meets with CPT Editorial Panel's Task Force

AAO President **Judith O'Connell** represented the American Osteopathic Association at a November meeting of a Manipulative Medicine Task Force appointed by the AMA's CPT Editorial Panel to consider the inclusion of manipulation codes in the 1994 edition of the CPT Manual. (Results of this meeting were not available at the time of this writing.) The Academy's Ad Hoc Committee on Federal Regulation of OMM, chaired by **Richard Feely**, has completed a proposal on new language for the osteopathic manipulative medicine codes which could appear in CPT. The full CPT Editorial Panel met the day after this Task Force and was to consider a recommendation to include OMT codes and to direct the AMA's Relative Value Updating Committee (RUC) to refine the codes and establish work values for them.

Ad Hoc Committee Prepares Survey

Chairman **Richard Feely** and his Ad Hoc Committee on Federal Regulation of Osteopathic Manipulative Medicine have completed the "qualitative" survey phase of their charge. Quality Expectations, Inc. of Evanston, Illinois provided the technical expertise in leading eight Academy members through a "delphi technique" which resulted in recommended language for OMT codes which might be included in the CPT manual. Dr. O'Connell presented this language in November to the AMA's Manipulative Medicine Task Force to its CPT Editorial Panel.

The Ad Hoc Committee is now completing work on a comprehensive AAO membership survey which will solicit data on demographics, practice patterns, usage of coding for reimbursement, and membership needs. If you are asked to participate in this survey in the near future, I encourage you to cooperate fully in completing the questionnaire. The results will enable the Academy to advocate reimbursement for OMT as well as plan and implement appropriate programs for all AAO members.

AAO Offers Board Prep in Colorado

The Board approved the Education Committee's recommendation to hold a Board Preparation Course and OMT Review on February 20-21, 1993 in Keystone, Colorado, just prior to the Colorado Society of Osteopathic Medicine's annual SKI/CME program. Program Chairperson **Melicien Tettambel** is completing the final details of the program and the staff is preparing the registration flyers and announcements. Look for details to arrive in the mail soon! The course offers interested physicians an excellent opportunity to prepare for the certification examinations which are scheduled for March 23 in Dallas, prior to the Academy's Convocation. Please pass the word along to your colleagues!

Sixty-four physicians attended the 2nd Annual OMT Update and Board Preparation Course last September in Orlando. Evaluations of the program were high and significant interest in an additional course was expressed by physicians who were unable to attend the Orlando program. This prompted the Education Committee and the Board of Trustees to negotiate with CSOM to hold the course at the Keystone Resort in February.

Plan Now for 1993 Convocation

Program Chairman **Carlisle Holland** has chosen the theme "Osteopathy and Children" for the 1993 Academy Convocation scheduled for March 24-27 at The Grand Kempinski Dallas. Dr. Holland continues the familiar format of lectures in the morning and hands-on workshops on Wednesday and Friday afternoons. Chairman **Raymond Hruby** has selected leadership themes as the topic for Saturday afternoon's Conclave of Fellows. All details about the program and registration should arrive this month! Plan ahead to join your colleagues at this important Academy event.

Meet Your Academy Staff

Members of the Academy should feel fortunate to retain the services of its five staff members. I assure you that I am grateful to supervise their work and coordinate their efforts to provide the highest quality of service to AAO members. The group is terrific and I invite you will show them your appreciation as you benefit from their services!

Joyce Ann Cost began her service to the Academy in April 1985 and has advanced to her current position as Associate Executive Director. Joyce's primary responsibilities are oversight of the AAO accounting and financial records/reports and coordination of details for all of the Academy's educational programs.

Lisa D. Rader is Coordinator of the American Osteopathic Board of Special Proficiency in Osteopathic Manipulative Medicine (AOBSPOMM) and Administrative Assistant to the Executive Director. An Academy employee since September 1988, Lisa concentrates her efforts primarily on the coordination of de-

continued on page 19

Case History

Anatomy, Asthma and Dysautonomia

By Elizabeth C. Sanders, OMM Fellow, SEUHS-COM

The following article is a summary of the case presentation made at the UAAO symposium in Kirksville on Founder's weekend. The author is an undergraduate teaching fellow in the OPP Dept. at Southeastern University of the Health Sciences and is currently serving as the Chairperson of the UAAO Executive Council.

The physician diagnosed my husband Paul with allergic asthma almost two years ago. At the end of the initial office visit, the doctor prescribed a Maxair inhaler for use during attacks and instructions to find new homes for our cats. Upon his return home, I questioned the validity of the doctor's diagnosis. I felt confident quick assessment lead me to pursue investigation of Paul's attacks.

Historically, Paul's attacks begin with itching of the anterior thorax, predominantly on the left side. He develops palpitations, shortness of breath and wheezing. He rapidly becomes tachypneic and anxious. If allowed to progress further, he develops repetitive sneezing or coughing attacks that can last for more than 30 minutes. The final culmination is a single violent episode of projectile vomiting. The attacks occur after meals, but have occurred during sleep. Patient has no recall of the mid-night attacks in the morning. During the attacks patient appears confused and disoriented. There has never been a loss of consciousness. The severity of the attacks worsened when he quit smoking cigarettes, just 6 months prior to presenting at his doctor's office. Prior to professional medical treatment, patient would use Triaminic cough syrup at bedtime. Usually, the attacks would simply run to the full blow state. Once vomiting occurred the attack would slowly subside.

Today, Paul, is a 26 year old white male with no past history of asthma as a child. He was born prematurely at approximately six months gestational age via normal spontaneous vaginal delivery. The first four months were spent in an incubator, under ultraviolet light and in high oxygen. Paul had chicken pox at age four. He had tonsillectomy the same year. Fracture of the left fifth digit at age four also. At the age of 10, he was restricted from playing soccer due to osteopenia of the left calcanues. Congenitally, patient developed only primary teeth, with the exception of a few milk teeth. His half sister has a similar dental history.

"I read that journal article with the eye of an Osteopath. Inflammation. Tissue congestions. Lymphatic stasis.
I started doing manipulative treatments on Paul on a regular basis."

After the Maxair inhaler was prescribed, Paul continued to have attacks. Frequently, the attacks were unmitigating even with the inhalers. The attacks occurred more frequently away from home, even in his car while driving; thus, proving the allergy theory invalid. Paul was started on Azmacort, an inhaled steroid, after literature stating that inflammation was the primary factor in asthma, not bronchoconstriction. I read that journal article with the eye of an Osteopath. Inflammation. Tissue congestions. Lymphatic stasis.

I started doing manipulative treatments on Paul on a regular basis. They started as symptomatic therapy; only performed when the symptoms were exacerbated. Eventually, at the slightest hint of the prodrome, Paul would ask for a treatment. Luckily he lives with an osteopathic physician.

I started initially treating his thorax. I knew if I stimulated his sympathetic chain, I could dilate his bronchioles. In many instances, a simple diagnosis of the thorax revealed rib dysfunctions, easily remedied with HVLA. Approximately 75% of the symptoms would remit after a single HVLA to the thorax. I then explored the cervicals and discovered that regularly, the third cervical vertebrae was in flexed position with sidebending and rotation to the right. It always had associated tenderpoints. The first rib on the right would usually be stuck down posteriorly with increased tension on the clavipectoral fascia bilaterally. The changes in the cervical regions contributed to the diminished sympathetic outflow. Treatment of the cervical region and its associated soft tissue effectively stimulated the cervical ganglion, allowing for greater sympathetic outflow.

I started studying the anatomy of the cervical region and discovered that the third cervical vertebrae, superior cervical ganglion and the internal

cartoid sheath are intimately associated. I had the key to the vagal overload. The theory of facilitation was more clear than ever. With dysfunction in the cranium, the third cervical vertebrae became malaligned secondary to dural tensions. This anatomical change caused alterations in the normal pathway and flow of the Vagus as it traveled through the neck within the cartoid sheath. Also, anterior to the third cervical lies the superior cervical ganglion and a main source of sympathetic innervation for the larynx and vocal cords.

The Vagus nerve meanders from the dorsal nucleus to innervate the throat, heart, lungs, and gastrointestinal tract. The cell bodies composed the floor of the fourth ventricle. Any change in the cranial anatomy or tension in the dural membranes would affect the outflow of the motor neurons of the Vagus nerve. The condyles of the occiput were dramatically compressed and severe sphenobasilar torsion was present. As the occiput was released the Vagus would discharge massively mimicking much of the attack symptoms.

Interestingly enough, even with thorough, precise treatment of the cranium, cervical, thoracic and sacral region the attacks continued to occur. Indeed, the severity of the attacks was greatly diminished and another episodes of vomiting had not occurred in 2 months since the cervical region had been addressed. The body as a unit became crystal clear when Paul suddenly had a dramatic and violent relapse about 10 months after we started OMT treatments. His attack occurred after a day of yard work. We had planted herbs and flowers. We had worked in the yard together all day. The episode began with the usual symptoms of itching and shortness of breath but progressed with ferocity. He was inconsolable. His Maxair inhaler was empty. Apparently, he had

continued on page 28

New OMM Residency-Plus-One Offers Much to the Profession

By Michael Kuchera, D.O., FAAO

The American Academy of Osteopathy offers both a two-year residency in Osteopathic Manipulative Medicine and a new one-year Residency-Plus-One program. Both lead to certification by the AOA in Special Proficiency in osteopathic Manipulative Medicine (C-SPOMM) but the "Plus-One" version emphasizes the uniqueness of the Academy contribution to graduate medical Education.

The "OMM-Residency-Plus-One" is available to any D.O. who has successfully completed an AOA-approved residency program. That residency is then accepted as the first year of the two-year OMM residency and the second year is designed to integrate OMM specialty level insights and manipulative skills into a patient care basis consistent with the applicants chosen primary specialty. The program should appeal to those wishing to practice their specialty with a strong osteopathic orientation, osteopathic specialty educators, and those wishing dual certification.

The AAO's Educational Standards & Evaluation Committee structured the Residency-Plus-One program to meet or reinforce very specific Academy functions:

1. Those certified in Osteopathic Manipulative Medicine should cut across all specialty lines and other specialists should continue to be encouraged to obtain concomitant certification in OMM;

2. Osteopathic specialists in any field can benefit from OMM specialty level education in applying the osteopathic philosophy, science, and art to their practices;

3. Osteopathic specialties in any field can expand their fields and contribute uniquely to the mission outlined by AT Still "to improve the existing system" of health care delivery by applying Osteopathic insights and practice to their chosen specialties;

4. Specialists in other fields practicing "osteopathically" with OMM level skills and knowledge will provide a much needed pool of teachers and role models for our osteopathic colleges.

Michael Kuchera, D.O., FAAO, now chairman of the AAO'a Educational & Standards Committee, developed the Residency-Plus-One proposal as a direct consequence of the first Graduate Medical Education Leadership Seminar with encouragement from soon-to-be AOA President, Mitch Kasovac, DO. The program was approved this year by the Committee on Postgraduate Training (COPT) and several slots are now funded and available. The Educational Standards & Evaluation committee would like to encourage additional quality OMM Residency-Plus-One programs to meet the anticipated demand for this training. Hospitals, colleges, or practices seeking approval for this program will need a director with a C-SPOMM as well as a program and facilities that meet the AOA guidelines for such a program. Interested sites should contact the Academy office or the chairman of the AAO Educational Standards & Evaluation Committee for a copy of the requirements and/or paperwork needed for approval.

Those candidates in their last year of specialty training, as well as recent and "not-so-recent" graduates from AOA-approved residences who wish to inquire about or apply for an OMM Residency-Plus-One program can contact the Academy office, 3500 DePauw Blvd. Suite 1080, Indianapolis, IN (317) 879-1881 or Dr. Kuchera (816) 626-2304. Think about the possibilities, then "D.O. it for your profession, D.O. it for yourself." ■

PATIENT EDUCATION IS VITAL TO OSTEOPATHY'S FUTURE

BY LAURIE BETH JONES

There are two points I want to make in this article. One is that we can never assume the public knows what osteopathy is, and that each of us must enter an on-going, daily, educational campaign. And the second point is that it is you, the members of the Academy, who will turn the tide.

Every Patient is a Potential Ally and Every Person is a Potential Patient

As I was leaving the AOA convention at the Marriott in San Diego, a well dressed gentleman came up to me and, noticing my campaign button, asked "What is osteopathy?" He was a professional golfer, and when I explained to him that osteopathic medicine offers a total body approach to health care with an emphasis on the body's ability to heal itself, his next words were "Where can I find a D.O.?" An executive director of a state association, was carrying out a load of T-Shirts with the Academy's campaign kit slogan "Osteopathic Medicine: The Total Approach To Health Care." The man who had done the T-shirts asked him "What is Osteopathic medicine?" When he explained briefly to him what osteopathic medicine represented, the man said "These are the kind of doctors I want for me and my family. Where do I find them?"

A name badge and a T-shirt. Simple things, really. Tangible things, however, that the lay public could read and was instantly intrigued with. The state director said, in recounting this story to me "Maybe we should declare a national T-Shirt Day and have everyone in or connected with the profession wear one of the Academy's Campaign T-Shirts." Not a bad idea. In an article kindly given to me by **Mark Cantieri, D.O.**, entitled That Peculiar Science: Osteopathic Medicine and the Law by **Francis Helminski, M.A., J.D.**, the author states that "Osteopathy has its present shape precisely because of judicial and legislative action." The author further went on to cite examples from history where legislators determined the shape of the profession through the laws they passed or didn't pass. I found it interesting that one of the references showed that "The Michigan Osteopathic Act was introduced by the legislature in 1897 by the Postmaster of Grand Rapids, who had been contacted by Michigan residents *treated at Kirksville, Missouri*. The bill passed the House 70 to 0, and the Senate 24 to 1." In other words, patients pushed it through.

"The legal bounds of osteopathic practice were eventually expanded by the legislatures, who were more sensitive *to direct popular pressure* than were the courts," writes Francis Helminski, M.A., J.D.

A prominent expert in cranial work confided to me recently that it was a patient who had insisted that she do cranial work that caused her to pursue further training at the Academy. A *patient* insisted that she learn it, and she did. Since patients and the public have far more influence, really, than physicians do when it comes to getting things done in the outside world, we must treat each lay person as a potential ally and educate them. I hear so many D.O.'s complaining about insurance companies' ignorance about the profession, an ignorance which directly impacts reimbursement issues. Yet often it is these same physicians who say they don't have time to "educate their patients." Perhaps if we had more educated patients, we would have more educated insurance companies.

The Academy Will Turn the Tide

My second point is that there is much broader interest in manipulation within the profession than many DO's think. Having been told by a former leader of the AOA that he could not endorse the Academy's campaign kit because it "focused too much on manipulation and A.T. Still," I have been more than gratified to see what I believe is a national resurgence of interest in "manipulation and the principles of A.T. Still." In fact, I believe that there is a rising ground swell of interest in manipulation that will surprise not only the AOA, but even some members of the Academy. When I spoke to the students at a recent SOMA gathering, I asked them what they most wanted to discuss. The almost universal appeal was "Let's talk about manipulation, and what really makes us different than M.D.'s."

Theresa A. Hom, D.O., who is this month's featured member in the

Academy D.O. Profiles, states that "When I started school, I probably qualified as palpatory disabled. I couldn't find a lesion to save my career. So I studied harder and went to the (Academy's) extra programs to learn what I needed to be a good DO."

A Director of Medical Education at an osteopathic hospital admitted to me that even he as a DO didn't feel comfortable doing manipulation because he had been trained in "crunch" techniques only. He expressed an interest in personally learning more about manipulation, and having the Academy come in to do some training with the interns.

Your programs are making a difference. When I first encountered the Academy, you struck me as a group of highly skilled physicians who mostly, through the apathy or ignorance of the larger body, spoke to and taught each other. I encountered a stable or shrinking membership, with programs attended mostly by the same people year after year. And I wondered if you were the keepers of a dying flame.

Two years later however, I can earnestly say, "Throw on the logs!" Because I see more and more people gathering, wanting to gather, around the principles which have made you great. I see physicians and medical practitioners from around the world coming to your convocations, wanting to learn what you know. I see students and young interns and residents and directors of medical education and hospital administrators and state executive directors and specialists wanting to return to, and openly embrace, the basics of what you teach.

I am convinced today that you are, indeed, geniuses, who have much to offer your own profession and the world. My hope and prayer is that you will begin to see yourself as the geniuses you truly are, and let your light continue to shine, and shine higher and brighter than it ever has before. ■

Dr. Korr Speaks to Rocky Mountain Academy

From left to right, Dr. Charles Schaap, Dr. Irvin Korr, and Dr. Harold Magoun

The newly formed Rocky Mountain Academy of Osteopathy held its Fall CME conference on October 17, 1992 at the Scanticon Hotel and Conference Center in Denver, Colorado. The Fall program, entitled "From the Ground Up," focused on the Osteopathic diagnosis and treatment of lower extremity somatic dysfunction and pain syndromes.

The Rocky Mountain Academy of Osteopathy (RMAO) was privileged to have **Irvin M. Korr, Ph.D.** as the featured speaker at the fall CME program. Dr. Korr lectured on "Health in the 21st Century—How Will the Osteopathic Profession Serve?" **Harold I. Magoun, D.O., FAAO**, the program chairman, lectured on indirect and direct action technique for the hip, knee, foot, and ankle. **Robert Wendorff, D.O.** addressed the counterstrain approach to those same areas, while **Charles B. Schaap, D.O.** presented muscle energy techniques. In addition, Dr. Magoun demonstrated how to perform a proper Osteopathic Structural Exam and spoke on the short leg syndrome. Dr. Schaap discussed the postural and functional aspects of lower extremity muscle balance.

The RMAO was formed by **Harold I. Magoun, D.O.** and **Charles B. Schaap, D.O.** for the purpose of furthering the eduction of Osteopathic principles and practices of physicians in the Rocky Mountain region. The need for the RMAO arose due to the tremendous increase in the awareness of the neuromusculoskeletal system and the proven efficacy of osteopathic manipulative treatment in the management of musculoskeletal conditions. With more and more non-physician practioners utilizing manipulative techniques, it is important for osteopathic physicians to maintain their leadership in this area through continuing eduction. In addition to providing quality OMT education, the programs put on by the RMAO provide a forum for constructive discussions about OMT issues. The current membership is growing, with forty-five members from the states of Colorado and Wyoming.

The first official business meeting of RMAO was held on May 23, 1992 at our first spring CME program. Dr. Harold Magoun developed and compiled the Bylaws and these were then reviewed by the membership and ratified. The Bylaws have allowed the RMAO to apply for regional component status from the American Academy of osteopathy. **Harold I. Magoun, D.O., FAAO** was formally elected to the office of president and **Charles B. Schaap, D.O.** was elected to the office of secretary/treasurer. Drs. Magoun and Schaap both specialize in Osteopathic manipulative treatment and have practices in southeast Denver.

Anyone interested in joining the RMAO or obtaining information about upcoming CME programs can do so by contacting the RMAO, c/o Charles B. Schaap, D.O, 8200 East Belleview, Suite 414, Englewood, CO 80111. ■

Primary & Secondary Respiration

By Robert P. Lee, D.O.

Prior to the revelations by William Garner Sutherland, D.O., [1] respiration was simply respiration. There was no differentiation between primary or secondary types. Applying the principles that Dr. A.T. Still taught him, the young Sutherland discovered the cranial rhythmic impulse (CRI) and extended osteopathic principles to the head region. He revealed a physiological mechanism, both subtle and powerful, which he termed the primary respiratory mechanism (PRM). He reasoned, if structure follows function, then what is the function of the sutures of the skull which appear to allow for motion? This paper will explore the characteristics of this motion and what significance it has in health and disease. It will also discuss what relationship this motion has to pulmonary ventilation, and why both of these vital movements are termed respiration.

DEFINITION

Definitions of respiration in standard medical references do not include Sutherland's concepts. Steadman [2] defines respiration as:

"1. The act or function of breathing; the act by which air is drawn in and expelled from the lungs, including inspiration and expiration. Called also external respiration.

2. Internal respiration is the exchange of gaseous constituents between the body cells and the blood."

Guyton [3] defines respiration as:

1. Pulmonary ventilation — the exchange of gasses between the atmosphere and the alveoli.

2. Diffusion — the exchange of gasses between the alveoli and the blood.

3. Transport — the exchange of gasses between the blood and the extracellular and intracellular fluid compartments.

4. Regulation — the control of these three elements by the central nervous system.

PULMONARY MECHANICS

The diaphragm increases the vertical dimension of the thorax with each inhalation. The ribs, sternum and thoracic spine work together to increase the anteroposterior diameter of the thorax. The abdominal muscles, the major muscles of exhalation decrease the vertical and anteroposterior diameters of the thorax. [3]

BONY THORAX

The ribs are constructed in such a way that each successive rib from the first downward describes a larger and larger radial diameter. When the external intercostal muscles contract, the ribs are drawn cephalad into a more horizontal position. The anterior attachments of the ribs at the sternum move anteriorly as they move superiorly and thereby increase the anteroposterior diameter of the thorax. The first rib is relatively fixed by its synchondrosis at the manubrium. The second rib is more mobile than the first, but less so than the remainder of the ribs. Thus, the first and second ribs provide the anchor for ribs three through twelve to be elevated. At the costovertebral articulations, the ribs rotate on their long axes. The costotransverse articulation acts as a fulcrum. Since it is very close to the head of the rib, a small motion at the costovertebral and costotransverse articulations creates a much larger arc of movement of the anterior body of the rib. The sternal angle becomes more prominent as the sternal body moves anteriorly and superiorly with the ribs during inhalation. [3]

It is interesting to note the frequent association of somatic dysfunction at the third thoracic vertebra in pulmonary disorders. [4] This may partially be explained by the relative immobility of the first two thoracic vertebra, first and second ribs and the manubrium, which imposes a greater requirement for movement upon the third thoracic vertebra. Of further interest is the fact that acupuncture points for treating disorders of the lung are also found at the tips of the transverse processes of the third thoracic vertebra. [5]

MUSCLES OF RESPIRATION

The diaphragm is the major muscle of inhalation. In quiet respiration the diaphragm and the external intercostals are the only active muscles. The external intercostal muscles elevate ribs three through ten. In deep inhalation the scalene and the sternocleidomastoid muscles are recruited to elevate and fix the first two ribs. [3]

In exhalation, the muscles of inhalation (the diaphragm and external intercostals) relax. The following muscles depress the ribs, in exhalation, to decrease the volume of the thorax: abdominal rectus, internal oblique, external oblique, transverse abdominus, internal intercostals and others. [4-6]

DIAPHRAGM

Since the diaphragm is bell-shaped, any contraction of the radial muscular elements will pull the central tendon downward. The diaphragm

is attached to the xyphoid process by two muscular bands and to the lower six ribs and the medial and lateral arcuate ligaments. The medial arcuate ligaments extend from the anterior surface of the body of L1 over the psoas major muscles and attach to the tip of the transverse processes of L1 bilaterally. The lateral arcuate ligaments proceed from the tip of the transverse processes of L1, cross over the quadratus lumborum muscles and attach to the tip of the twelfth rib bilaterally. The significance of the relationship of the quadratus lumborum and psoas major muscles to the diaphragm will be discussed later. The crura (legs of the diaphragm) ascend from the anterior surfaces of the upper lumbar vertebrae to anchor the posterior aspect of the diaphragm, the right crus arising from L1-L3 and the left, from L1-L2. [7] The interrelation of the functions of the diaphragm and the lumbar spine will be mentioned later.

Additional structures which have a functional association with the diaphragm include: 1) the thoracic duct, which pierces the diaphragm through the aortic hiatus at the level of the twelfth thoracic vertebra, 2) the inferior vena cava and hemiazygous veins, which transit the vena caval hiatus at the level of T8-9, 3) the esophagus, which penetrates the diaphragm at the level of T10 in a position intermediate between the aortic and vena caval hiatuses. [7]

Functional interrelationships exist between the diaphragm and other parts of the body via fascial connections. The superior diaphragmatic fascia is confluent with the pericardium, which continues into the pretrachial fascia. Likewise, layers of fascia are continuous from the superior surface of the diaphragm, up the exterior surface of the esophagus and to the base of the sphenoid bone of the skull, via the buccopharyngeal fascia and prevertebral fascia. Inferiorly, fascial coverings of the psoas and quadratus muscles provide connections to the lesser trochanters of the femurs and the crests of the ilia, respectively. [8] Thus, one can appreciate the importance of this centrally located pump, the diaphragm, to areas as distant as the lower extremities and the cranium.

SUMMARY: PULMONARY VENTILATION

The pumping action of the diaphragm creates a negative pressure, alternately in the thorax and then in the abdomen. By this effect, the diaphragm a) forces air into and out of the alveoli for exchange of °2 and C02 between the ambient air and the blood, (external respiration) b) assists the flow of venous blood up the inferior vena cava, against gravity, and into the right atrium of the heart, and c) draws the lymphatic fluid up the thoracic duct and returns it to the venous circulation.

Likewise, the exchange of °2 and $C0^2$ between the cells and the blood (internal respiration), depends upon the efficient operation of the components of external respiration: the muscles of respiration (especially the diaphragm), the bony thorax and all the functional relationships and fascial attachments from the cranium to the extremities. Alternately, these musculoskeletal tissues of external respiration require a healthy exchange of °2 and $C0^2$ from internal respiration. Thus, we are struck by the interplay between the external mechanical function and the internal chemical one.

IDEAL PULMONARY VENTILATION

Dr. Still said, "We want the student to carry a living picture of all or any part of the body in his mind, as an artist carries the mental picure of the face, scenery, beast, or anything that he wishes to represent by his brush. I constantly urge my students to keep their minds full of pictures of the normal body." [9] As we examine our patients, how shall we visualize a normally functioning respiratory system?

First, the diaphragm is free in its excursion, redoming fully as it relaxes in exhalation. Secondly, the abdominal wall is supple. It rises and falls easily, from the xyphoid to the pubes, as the abdominal contents are alternately compressed and released with inhalation and exhalation. All the ribs move freely, anteriorly and superiorly with each inhalation, and all ribs move in an equal and opposite direction during exhalation. The articulations of the ribs with the vertebrae are mobile. The paravertebral muscles and thoracic vertebrae themselves are supple and resilient. The sternum is in the midline and moves fully and symmetrically in inhalation (superiorly and anteriorly) and in exhalation (inferiorly and posteriorly). The sternal angle is prominent and mobile, becoming more prominent with inhalation. [10]

The lumbar spine moves freely. When the patient is supine, the spinous processes touch the surface of the examination table, indicating the crural attachments, the arcuate ligaments, and the psoas and quadratus muscles are all functioning symmetrically and freely, allowing the diaphragm to redome fully at each exhalation. The pelvis is level, measured in the horizontal and coronal planes, indicating that the lengths of the psoas and quadratus muscles are equal bilaterally. The sacrum rocks freely on a transverse axis with each inspiration: the sacral base moves toward the surface of the exam table and the coccyx moves towards the pubes. The anterosuperior iliac spines move anteriorly, inferiorly and exter-

nally, while at the same time, the ischia move posteriorly, superiorly and internally. The extremities are equal in length and rotate externally with each inhalation, and internally with each exhalation with equal excursions. When the thumbs extend equidistantly above the head, this indicates the fascial attachments of the upper extremities to the ribs, thoracic spine, iliac crests and the base of the cranium are functioning equally. No edema or bogginess is noted in the peripheral tissues, indicating proper lymphatic and venous drainage. [10]

By this description, it is evident that external respiration does indeed move the entire body, from cranium to extremities. Likewise, internal respiration influences the entire body; with the exchange of °2 and C0² between the tissues and circulation. The relationship of the whole body to respiration is equally important in the concept of the primary respiratory mechanism.

THE PRIMARY RESPIRATORY MECHANISM (CRANIAL CONCEPT)

The cranial concept requires a thorough understanding of osteopathic principles. It is the application of these principles to the head region in a detailed physiologic manner. Osteopathy has been defined as a comprehensive system of diagnosis and treatment, based on the interrelationships of anatomy (structure) and physiology (function), for the study, prevention, and treatment of disease. Osteopathy concerns the entire human organism, in relation to its internal fluid environment. Osteopathy propounds that the entire body, if adequately nourished, functions to maintain, repair, and heal itself, if its structure and function are in proper order. All parts of the body are to move within their normal range of motion; this includes the cranium. To be healthy, tissue must receive a normal blood and nerve supply. [11]

Therefore, the physician approaches the patient who has the disease, not the disease which has the patient. The principle approach is to normalize the structure of the total body, including the cranium, insofar as it governs body function. [11]

DEFINITION OF PRM

There are five precepts as outlined by Dr. Sutherland, which define the primary respiratory mechanism (PRM):

1. The inherent motility of the brain and spinal cord.

2. The fluctuation of the cerebrospinal fluid.

3. The mobility of the intracranial and intraspinal membranes.

4. The articular mobility of the cranial bones.

5. The involuntary mobility of the sacrum between the ilia.

One might add, the effect of all these phenomena throughout the entire body. [11]

INHERENT MOTILITY OF THE BRAIN AND SPINAL CORD

It has been recognized for years that the brain moves. At craniotomy it has been described as "vibrantly alive...incessantly active...dynamic... highly mobile, able to move forward, backwards, sideways, and to circumduct and to rotate." [11]

Kimberly has stated that there are four definite motions that have been observed at operation. First, there is a pulsation which is synchronous with cardiac activity. Secondly, there is an oscillation which coincides with pulmonary inhalation and exhalation. There is a third wave that is independent of these two and is somewhat slower than pulmonary ventilation. A fourth undulation occurs at about one time per minute. [11]

Nils Lundberg [12] in his dissertation of 1960 reported findings, to which reference continues to be made in the neurosurgical literature. He continuously recorded the ventricular fluid pressure at neurosurgery and identified three waves: the A-wave: a prolonged increase in ventricular fluid pressure which was associated with pathological changes in respiration and appeared to be an ominous sign; B-waves: a change in ventricular fluid pressure occuring about one time per minute (ranging every one-half to every two minutes) which were associated with deep sleep and Cheyne-Stokes respirations. The crests of the B-waves were associated with the hyperpnea and the troughs with the apnea of Cheyne-Stokes respirations. The C-waves: he said are similar to TraubeHering waves; these were described earlier in the ninteenth centurv as rhythmic variations in blood pressure at the rate of 6-7/minute. [13]

Of the C-waves, Lundberg is quoted in his paper as stating, "When distinct C-waves were observed in the ventricular fluid pressure curve, the pressure level was unusually high, which agrees with the assumption that the C-waves are signs of disorder due to increased intracranial pressure, another explanation must, however, be considered, namely that the C-waves are entirely physiologic phenomenoma, usually indetectible, but visible when their amplitude is magnified by rise in the intracranial pressure". [12]

In the year following Lundberg's report, Moskalenko [14] in Moscow described three waves using plethysmography. One was coincident with cardiac pulsations. A second wave occurred with pulmonary respiration. A third wave which was detected about every minute, he called the "third order wave." He had no explanation for the third order wave.

Miller [15] confirmed Lundberg's findings in 1985. He reported a sharp,

peaked increase in ventricular fluid pressure of 20-25 mm Hg. which was associated with hyperpnea of Cheynes-Stokes respirations. This was followed by a long trough that was associated with the apnea of the cycle. This B-wave occurred about one time per minute. Less commonly, he found a C-wave with a frequency of four to eight per minute which he seemed to relate to the Traube-Hering waves. In 1978 Martin [16] reported B-waves in normal brains. A search of the literature does not reveal any reports of C-waves in normal brains. However, the Traube-Hering wave has been described throughout the neurosurgical and physiological literature. [12, 13, 17, 18, 19]

Viola Frymann [20], in 1971, demonstrated gross motion of the human cranium by applying calipers to the sides of the calvarium. These were connected to a transducer and chart recorder. She was able to distinguish waves which were associated with cardiac and respiratory activity, as well as a third wave of smaller amplitude at a rate of ten to fourteen times per minute.

Retzlaff et al [21], in a series of experiments at Michigan State University College of Osteopathic Medicine, in the 1970's were able to verify cranial motion in squirrel monkeys. In 1988, Scalone [22] in an unpublished study found that the CRI, which he monitored by palpation, decreases in rate but increases in amplitude, when the subject is anesthesized. Using potent anesthetic agents, Halothane, etc., the rate falls to four to eight times per minute. This is the rate of Lundberg's C-wave which was detected during neurosurgical anesthesia. Scalone reports such an increase in amplitude that untrained palpators could detect it. Interestingly, the rate is reduced to only an average of eight times per minute if less potent drugs, such as barbituates are used. If caudal epidural, or local anesthesia is used, the rate remains at the pre-anesthetic level, ten to fourteen times per minute, the rate as reported by Frymann. Scalone's findings may be important to explain why Lundberg's C-wave in neurosurgical patients (4-8 cycles per minute) and Frymann's report of the cranial rhythmic impulse (10-14 cycles per minute) differ.

MODELS OF MOTILITY

There are two postulated explanations for this motion of the central nervous system. Contractility of the neural tube results in foreshortening of the long dimension of the brain and spinal cord. This theory is supported by research done in 1951 by Lumsden and Pomerat. [23] They described slow contractile activity of oligodendroglia in cell cultures of the rat corpus callosum. Glial cells are the most numerous type in the CNS.

Such a foreshortening of the neural tube represents the inhalation or flexion phase of the primary respiratory mechanism. Shortening of the long dimension of the spinal cord resembles the contraction of the earth worm, but for the brain, with its ram's-horn configuration, this shortening of the long dimension produces a more complex overall movement. Indeed, the anteroposterior dimension is shortened, but at the same time, the temporal lobes unfold laterally to create a widening of the lateral dimension of the brain, and the vertex elevates. These movements represent a change in shape, not in size. An overall compaction of the brain substance occurs, as in a sponge. The PIA mater, the external covering of the brain, and the ependyma, which lines the ventricles approximate. In this way, the ventricular volume is expanded. It is postulated, therefore, that momentarily, production of cerebrospinal fluid (CSF) is increased by the ependymal cells. At the same time, waste products and substances with physiological activity which are produced by the brain are squeezed into the ventricles. The physiological centers in the central nervous system, including the fourth ventricle, the hypothalamus, and the pituitary, all communicate directly with the ependymal surface of a ventricle. The exchange of physiologically active substances and waste products between the brain tissue and the CSF, contained within the ventricles parallels the function of internal respiration associated with the pulmonary system, in which waste products and nutritive substances are exchanged between the alveoli and capillary blood . [11]

The second model of motility is the pressurestat mode. Retzlaff, [25] in 1978 traced a single axon from the sagittal suture to the wall of the third ventricle. This finding supports the theory that a decreased stretch of the sagittal suture leads to an increased production of CSF from the choroid plexus, and visa versa. This could explain the pulsatile wave form of the intracranial pressure. From as early as 1922, with Weed's [26] study, it has been known that the pressure of the cerebrospinal fluid is less than arterial pressure and greater than venous pressure, and independent from them both. Portnoy [27] et al in 1982 determined by analyzing the CSF pulse wave-form, that the intracranial pressure is under the influence of autoregulation. Bering, [28] in 1962 proposed that the cerebrospinal fluid pulsations are the result of a pulsatile secretion from the choroid plexuses.

Both models of motility are reasonable and both are supported by research. They are compatible and reinforce each other. One model correlates the contraction of the brain substance (oligondendroglia) with the pumping action of the ventricles and

the subsequent fluctuation of the CSF. The other model relates the movement of the cranial bones with a fluctuating secretion of the cerebrospinal fluid from the choroid plexuses.

CIRCULATION OF CSF

It is generally agreed that the cerebrospinal fluid is formed by the choroid plexuses and secreted into the ventricles. The ependymal cells which line the ventricles, cover the vascular projections of the choroid plexuses. Sodium is secreted by active transport by the ependyma. Chloride ions electrostatically follow the sodium. Large volumes of water then are attracted into the ventricular space. The osmotic pressure of the cerebrospinal fluid is 160 mm Hg. greater than that of the plasma. Potassium is transported out of the ventricles by the ependyma. The concentration of sodium is seven per cent greater in the CSF than in the plasma. Potassium is forty per cent greater in the plasma than in the CSF. Because glucose is transported slowly across semi-permeable membranes, its concentration is thirty per cent greater in the plasma than in the CSF. The CSF diffuses across the ependyma and into the peri-vascular spaces of the subarachnoid arterioles as they penetrate the brain substance. Into the perivascular spaces, substances manufactured in the brain (peptides, hormones, and many others, yet-to-be-discovered) are secreted into the CSF. This potent liquid circulates from the ventricles where it is manufactured into the subarachnoid space where the contribution from the perivascular spaces is made. Here it is then re-absorbed by the arachnoid granulations into the venous circulation. (29)

WATER THE WITHERING FIELD

Andrew Taylor Still said: "The CSF is one of the highest known elements that are contained in the body, and unless the brain furnishes this fluid in abundance, a disabled condition of the body will remain. He who is able to reason will see that this great river of life must be tapped and the withering field irrigated at once, or the harvest of health will be forever lost." (30) Many investigators have examined the postulate that the CSF "waters the withering field", that is, it percolates to the periphery, creating an additional circulation to the one mediated by the arachnoid granulations. After all, infants have no arachnoid granulations until the development of the choroid plexuses. Higher animals have neither arachnoid granulations or choroid plexuses. What mechanism do these living systems use to circulate the CSF?

Key and Retzius, (31) in 1876 in Stockholm injected, under pressure, colored gelatin into the subarachnoid space of cadavers and found it distributed a considerable distance along spinal nerves. Nearly one hundred years later, in 1968, in Ontario, Canada, Steer and Horney (32) had similar findings. They noted that constriction of a nerve trunk resulted in a swelling proximal to the ligature. Therefore, they injected blue powder into the subarachnoid space of pigs and sheep under Pentobarbitol anesthesia. They found it deposited all along the peripheral nerves from their exits at the vertebrae to the myofascial structures and even to the integument. Injections of the same powder into the subdural space was only found locally. Injections into the jugular veins resulted in deposition in the lungs. Many reports of the distribution of dyes from the subarachnoid space to the periphery are in the literature: Quinke (33) in 1872 in Germany, Goldman (34) in 1913 in Berlin, Germany, Cathelin (35) in Paris France in 1912, Funaoka (36) in Kyoto, Japan in 1930, and Weed (37) in 1914 in the United States, who concluded that there were two modes of reabsorption of the CSF: a rapid re-absorption, which occurs through the arachnoid granulations, and a slow re-absorption, through the lymph channels. Speransky, (38) in 1943 performed a classic series of experiments, and concluded that the CSF communicates with the lymph.

Hassin (39) in 1947 examined the spread of dye from the subarachnoid space and discovered that it passes through the meningeal cuff at the spinal ganglion into the epineurium, perineurium, and endoneurium by which it proceeds to the terminus of the spinal nerve. Erlingheuser (40) in 1959, added to our understanding by a review of the literature. He concluded that the CSF flows through microtubular collagen fibrils which compose connective tissue. Thus, the CSF proceeds from the endoneuriumto the endomysium of muscle and beyond into the Sharpy's fibers of bone. Schmidt and Lantermann (41) showed how the CSF bathes all the tissues surrounding the spinal nerve. Incisures, named after these two investigators, allow direct communication from the axonal membrane through the myelin sheaths to the external surface of the spinal nerve. ■

Part II of this article will run in the Spring AAO Journal.

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INTEGRATING OSTEOPATHIC MEDICINE INTO THE SECOND 100 YEARS

BY JUDITH A. O'CONNELL, D.O., PRESIDENT

A CENTENNIAL CELEBRATION & MANIPULATIVE UPDATE, OCTOBER 8-11, 1992
KIRKSVILLE COLLEGE OF OSTEOPATHIC MEDICINE
PRESERVING THE LEGACY: THE EDUCATIONAL PROGRAMS OF THE AMERICAN ACADEMY OF OSTEOPATHY

"Preserving the legacy", that is the role of the American Academy of Osteopathy as perceived by the profession in general. It is one that has carried the profession through the "lost years" of M.D. assimilation, fights for practice rights and equality in professional standings. It has been the Academy that has kept the flame alive as the profession itself was becoming more non-osteopathic! We became the alter ego of a schizoid profession who had lost its way while trying to be "just like them."

The Academy began to act the part. The commitment of its membership to the concepts of our founder, Dr. Still, became a threat to those who wished to be M.D. look alikes,and the Academy took on the appearance of a group of outsiders, who still held on to the archaic concepts of an old country doctor. The Academy's response to this was one of exclusion. They rounded up their wagons and collected their provisions, and began to communicate only with those that they felt were safe. The heart and soul of the only successful American medical revolution was safely tucked away where people could look and marvel at it, while not having to really deal with it. The profession seemed happy, it would continue to act as M.D. look alikes while not feeling guilty about forsaking their heritage because the Academy was there. So the Academy became the "preservers of the legacy" in fact and action. But the profession was not happy.

Students, those young upstarts, were beginning to ask for the osteo-

pathic difference. At first it was in whispers, then in talk and now in loud shouts, "WE WANT MORE!" And what was the professions response? Go talk to those guys at the Academy, they know about that stuff. And so they came. And the circled wagons were approached by the life blood of our profession, our students. And what did the Academy do? It welcomed them in, and in doing so, they changed forever their role. No longer could they hide in their sage circle, now they had to respond to the challenges of the students in their quest for knowledge and identity. No longer could the Academy act as "preservers" alone, now they gad to act as mentors, and disseminators of the legacy; to enlighten the students and continue to lengthen the shadow of Dr. Still.

The students came in small groups at first, but then the word was out, they found osteopathy and it was alive and well in the Academy. And the numbers kept growing and as of our last convocation, we had more students registered then practicing D.O.'s! Something else also happened. Those students were practicing as D.O.'s and becoming involved in colleges, state and national politics, and patient care. This same voices that cried our for more were now saying proudly, "WE ARE DIFFERENT AND WE CAN MAKE A DIFFERENCE!" "A.T. STILL IS ALIVE AND WELL AND LIVING IN AMERICA!"

So what has this all got to do with the educational programs of the Academy? Everything. The circled wagons have found leadership and direction and are moving again. We are everywhere.

You will find our members involved in education in the colleges, hospitals and lecture circuits. You will find new and exciting programs directed at students, practicing physicians, foreign D.O.'s and even the non D.O. community. We have conducted two international symposia which brought together world renowned researchers for the first time on subjects important tot he heart of osteopathy, viscero-somatic connections and nociception's relationship to the neuro-endocrine response. We have programs on application of osteopathy in clinical practice, and we are developing programs for intern and resident integration of osteopathic principles into their chosen fields, whether in D.O. or M.D. training programs. We have opened channels of communication with M.D. training programs. We have opened channels of communication with M.D. groups

that also wish to partake of the osteopathic legacy. We are teaching osteopathy federal regulatory agencies and defending our difference in the healthcare marketplace. We are no longer "the guys over there who follow that eccentric country doctor." We are the national educators and spokespeople for osteopathy. We are Osteopathic Advocates. We will no longer tolerate our profession's split personality. We see our dysfunction and we are taking steps to correct it in true osteopathic fashion.

Preserving the legacy conjures up images of dusty old books, tint types, boots and bones displayed in a museum. It is important, and just as the tree needs its roots to grow, so do we. The Academy has also begun to grow and expand into a new era, the next 100 plus years. We are committed to the expanding osteopathic concept and its rightful acknowledgement, acceptance and utilization within and without our profession.

I liken changes in the Academy to the life cycle of a butterfly, since a life cycle is what we are involved in. A caterpillar, young and inexperienced, begins life by gathering knowledge and direction. As it grows and matures, it becomes aware of its hidden purpose, to become a butterfly. This seemingly impossible task becomes the motivating force to its life. To accomplish this, it realizes it must be transformed and engages the cocoon as a place of preservation and transformation. It waits for the time to be right to emerge, in full actualization. When directed by an internal impulse and after struggling to release itself from the cocoon, the caterpillar emerges transformed, to engage life as a mature butterfly, capable of perpetuating life. The Academy began as a place of learning for the young osteopathic heart and soul. It grew in knowledge and wisdom and recognized that Dr. Still knew the great potential of osteopathy in healthcare. The world was hard and cruel and much adversity was thrown at this young group. They decided that the potential of osteopathy was too important to lose, so they wisely entered their cocoon and preserved their heart and soul awaiting the appropriate time for the butterfly to appear. That time has come.

The Academy is emerging from its cocoon now as leaders grounded in the wisdom of the caterpillar ready to fly on the wings of the butterfly. If I had to sum up the appropriate phrase to describe the Academy today, it would be updated to be: "PRESERVERS OF THE LEGACY, LIFE GIVERS TO THE DREAM, AND CREATURES OF THE FUTURE." Come fly with us! ■

Message from Exec. Director continued from p. 7

tails for the Board of Trustees, Board of Governors and AAO committees.

Sarah K. Neel coordinates the activities of the Undergraduate American Academy of Osteopathy (UAAO) and assumes responsibility for production of all AAO publications, including *The AAO Journal*, yearbook, directory and other desktop publishing projects. Sarah joined the Academy staff in June 1991.

Tamika I. Griffin serves the Academy as Bookkeeper and Inventory Clerk. I hired Tamika in September to replace Joanna Aquara who retired after nine years of service to the Academy. An employee with significant prior experience, this month Tamika completed her degree in accounting and now can devote her energy to moving all of AAO's financial accounting and record keeping to a computerized system.

Gigi Rondinella is the Academy's newest employee who assumed her duties as Receptionist and Secretary when the AAO relocated to Indianapolis. She is no stranger to osteopathy since she previously was Administrative Assistant for the Indiana Association of Osteopathic Physicians and Surgeons.

Relocation News

Gradually, your staff is settling into the new office environment at The Pyramids at College Park. We have endured the typical frustrations of moving into new offices and have arranged our personal work spaces to suit our individual needs and tastes. We extend a standing invitation to all Academy members to visit the new offices at any time.

The Academy's real estate broker continues to market the old offices in Newark, Ohio but has been unsuccessful to date in securing an interested buyer who qualifies for the financing required to make the purchase. The good news is that there are individuals interested in the property; the bad news is that the banks are extremely cautious with commercial loans. I remain hopeful that progress will be made soon in the sale of the old offices. ■

Stephen J. Noone, CAE
Executive Director

AOA/Burroughs Wellcome Resident Leadership Award

Brian Degenhardt, D.O., has been chosen as a recipient of the 1992 AOA/Burroughs Wellcome Resident Leadership Award. This award is given to an osteopathic resident who has demonstrated a significant personal service contribution to their community. Receipt of this award included a $1,000 stipend to supprt the D.O.'s attendance at the AOA National Convention, Nov. 1-5, 1992, in San Diego, CA. Additionally, Burrougs Wellcome hosted a dinner in Brian's honor Nov. 1, 1992. ■

1992 Golden Ram Society Continues To Grow

The list of donors to the 1992 Golden Ram Society continues to grow daily. In the September issue of *The AAO Journal*, the Society reported 44 donors with gifts exceeding $12,375 to the 1992 Campaign. The list now has grown to 56 contributors who have donated over $15,350 toward the 1992 goal of $30,000.

Originally the Golden Ram Society supported the 1989 International Symposium. Due to the generous response of Academy members to this appeal, the AAO Trustees and Governors reactivated the Society as an annual fund raising effort with a focus on the Academy's revised long range educational goals.

Contributors now include the following:

A.T. Still Club ($1,000 or more)

Barbara J. Briner, D.O.
Isabelle Chapello, D.O., FAAO
Anthony G. Chila, D.O., FAAO
Gerald J. Cooper, D.O., FAAO
John C. Glover, D.O.
David Heilig, D.O., FAAO
Harold Magoun, D.O., FAAO
Nicholas S. Nicholas, D.O., FAAO
Judith A. O'Connell, D.O.
Gary L. Ostrow, D.O.

T.L. Northup Club ($500 - 999)

Philip E. Greenman, D.O., FAAO
Michael L. Kuchera, D.O., FAAO

Louisa Burns Club ($250 - 499)

Viola M. Frymann, D.O., FAAO
Albert F. Kelso, Ph.D.
Hollis H. King, D.O.
Johanna R. Leuchter, D.O.
Ross E. Pope, D.O.
Kathryn Ann Schmaltz, D.O.
Karen M. Steele, D.O.

Vicki E. Dyson Club ($100 - 249)

John E. Balmer, D.O.
Myron C. Beal, D.O., FAAO
Daniel Bensky, D.O.
Harold A. Blood, D.O., FAAO
Stephen D. Blood, D.O., FAAO
Berkeley Brandt, Jr., D.O.
Boyd R. Buser, D.O.
Lee F. Elliott, D.O.
April Gardner, D.O.
Lon Hoover, D.O.
Raymond J. Hruby, D.O., FAAO
Paul E. Kimberly, D.O., FAAO
William J. Kirmes, D.O.
Edna M. Lay, D.O., FAAO
Beverly I. Maliner, D.O.
Lcdr. T.M. McCombs, D.O.
Norman C. Neeb, D.O.
Daniel Ransmans, D.O.
Charles B. Schaap, D.O.
Ida C. Schmidt, D.O., FAAO
Doris M. Tanner, D.O.
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Robert G. Thorpe, D.O., FAAO
Frank C. Walton, Sr., D.O.
Ralph L. Willard, D.O.

Supporter Club ($99 or less)

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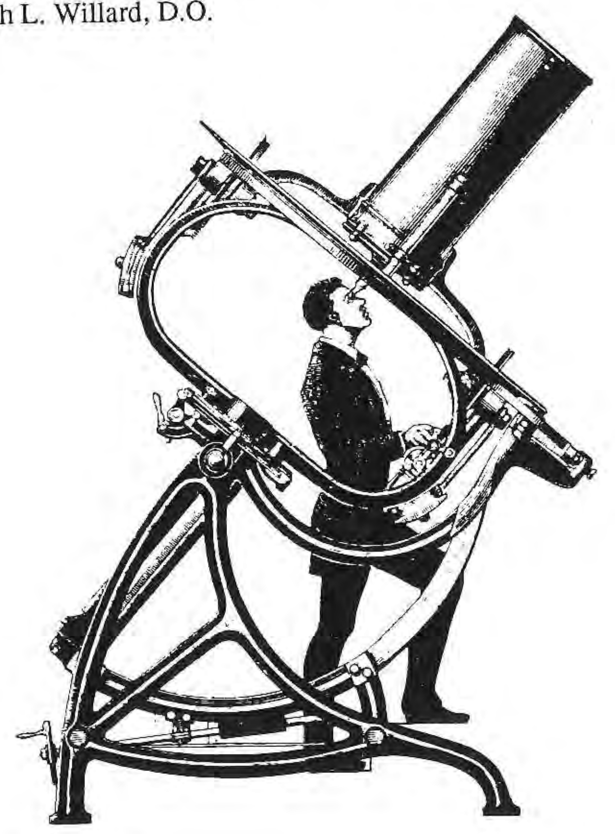
Stephen M. Davidson, D.O.
Guy A. DeFeo, D.O.
Robert W. England, D.O., FAAO
Hunter J. Hanson, D.O.
Suzanne M. Laurel, D.O.
Robert P. Lee, D.O.
Gerald G. Leuty, D.O.
Florence I. Medaris, D.O.
Michael J. Warner, D.O.

Have you made your contribution for 1992? If not, please seriously consider sending your donation today and help us reach the goal of $30,000 for the year. The end of the year is an excellent time to remember the Academy in your charitable giving. Donations are tax-deductible as charitable contributions. ■



LETTER TO THE PRESIDENT

Dear Dr. O'Connell,

I am writing to you for a number of reasons. However, I really wanted to congratulate and especially thank you for you current efforts and success with regard to the third party payors on OMT. Unfortunately your efforts will go unnoticed by many of our colleagues who for whatever reasons choose to *hide* their osteopathic training and roots by either putting "Dr." before their name and eliminating the "D.O." at the end or just never using their hands on incorporating hands-on holistic approaches to their medical practices.

I am lucky to be part of a truly osteopathic primary care practice in which OMT plays an integral part both in the hands-on approaches and holistic attitude towards *all* patients. While our osteopathic and allopathic colleagues are complaining about the economy and related problems in regard to regulatory medicine, we are enjoying excellent rapport with our patient population and daily influxes of new patients all without restriction as to their type of insurance or means of payment.

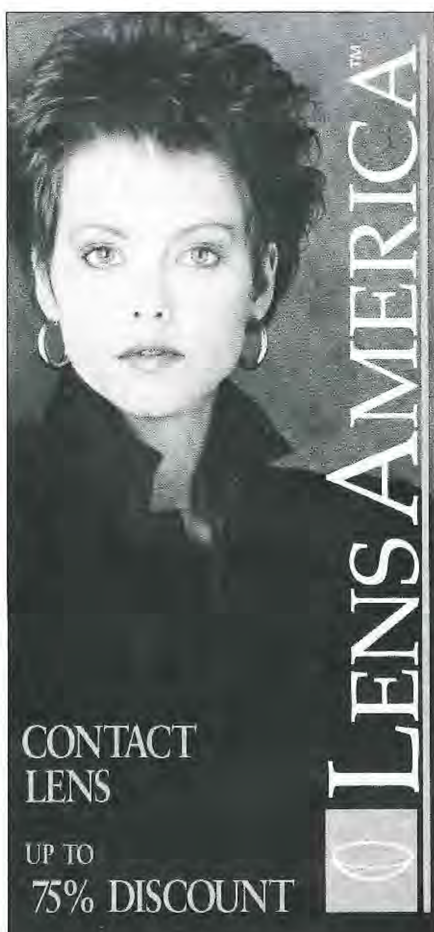
As for the AAO, I am proud to be a member and hope that I can influence more D.O.'s and others to become members. It seems you me that the AAO is our osteopathic heritage. The addition of Ms. Jones to the AAO's public relations section is certainly a boost to the quality of our organization.

As for chiropractors, I am duly impressed that you were able to thwart what seemed to be an inevitable attempt at equivocating OMT with chiropractic. They have such a powerful lobby, both politically financially, and much more sophisticated than any we could offer that it is a wonder you were able to accomplish this task. However, today in my area and with regard to my interest in OMT, it appears that the newer D.O.'s, including medical students and residents, are totally disoriented in using their hands in clinical practice and the bulk of interested people are M.D.'s and the lay public. There are exceptions to this in that a few chosen students and interns have embraced the advantages of utilizing OMT when Dr. Pearson and/or I speak with and teach the academics and show them effective procedures in our office.

Chiropractic was born on the principles of Osteopathy and owes much of its heritage to our profession. The public should be and should *have been* made aware of this a long time ago. Instead, there is a constant ignorance of our profession in the lay media where it really counts and the contribution of osteopathy and D.O.'s to manipulative treatment in this country and the world constantly ignored. As you can read in my letter to *The New York Times* and elsewhere enclosed, I have tried to enlighten people to these facts. The AOA certainly has not helped to do this or so many of us would not have to spend so much time with our patients or the public. I *do* enjoy this challenge, however, and will continue to be vocal and journalistic (even thought I am a novice) on these issues. We are a yet undiscovered entity in medicine today and when the general public becomes as aware as perhaps my patients are of our pride and uniqueness then I believe D.O.'s will finally get the credit they so desperately and richly deserve. I read once in a issue of Sports Illustrated back in 1988 or so, that tennis star Martina Naratilova owed her comeback to tennis to treatments for her back problem to an osteopath (I don't agree with this archaic term in the 90's) in Arizona. Its too bad that this didn't receive more national exposure or attention. This is the type of savvy P.R. we need and that the chiropractic profession has so effectively usurped in the form of Princess Di, Joe Montana, and other celebrity and national sports figures who *regularly* visit those practitioners. Let's not forget the sport of body building which has embraced the concept of chiropractic as the leader in manipulative health care.

Again, I want to thank you for your efforts.

David S. Abend, D.O. ■



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How Osteopathy Was Evolved

By A. T. Still

From the "Journal of Osteopathy" August, 1904

During the early years of my career as a physician, I had many obstacles to meet and to overcome under the conditions then existing. I was always seeking a better method, and thirty years ago I took as my subject the form and functioning of the human body. Although I was about as well posted in anatomy as the ordinary physician I found that in reality my knowledge of the subject was limited. I knew that there were about 206 bones in man's framework. Each bone had two ends and as many articulations. I knew something about how one bone articulated with another. I looked upon man as the perfect machine which was run by a force we call life. I knew that if a hip was dislocated and the femur kept out of its articulating socket, that a man would have an unnatural, wobbling gait. I knew that the way to correct this was to put the thigh bone back into its socket. So long as it stayed out of its socket, just so long the man would not walk properly and would present an unnatural appearance while in motion.

I began to reason that if a dislocated hip would derange the appearance of a man while in the act of walking, what might we expect in the functioning process with the head of a humorous dropped down upon the axillary vessels and nerves? Could a normal action or a normal physical condition of that arm be expected? What would be the effect of pushing a clavicle at its sternal articulation against the nerves and blood vessels of the anterior part of the neck? Would it produce an enlargement of the thyroid gland by pressure on the thyroid veins, causing what is commonly known as goiter? Is that the cause of blood and other fluids being detained in the thyroid gland and is the enlargement caused by venous blood failing to pass back to the heart?

I proceeded to examine the bony relations in a few cases of goiter—both simple and exophthalmic. In every case I found almost complete dislocation of the clavicle, the inner end onto the blood vessels of the neck and the outer end forward and off the acromion process; also there was usually one or both of the first ribs pushed far back and off their spinal articulations. I adjusted ribs and clavicle to their normal positions, stagnation of fluids stopped and enlargement of the thyroid gland disappeared. I did not stop with one experiment, but tried others. In exophthalmic goiter I proceeded to adjust the bony framework of the upper dorsal, and to my surprise, in a few days or weeks, when the work was properly done, the eyes became natural in appearance, the heaving of the heart stopped and the goiter disappeared. I was proud to know that my philosophy could be demonstrated in all cases of goiter by reduction of the tumor and the disappearance of the distressing symptoms.

In sciatic rheumatism, I found obstruction to blood circulation to be the cause of the pain and suffering in the lower spine and limbs. In every case I found a subluxation or dislocation of the head of the femur; or one or both innominates off their articulation with the sacrum. This reduced the subject of sciatic rheumatism to a demonstrable fact of variations in bones and muscles.

Proceeding with my experiments, I found variations in ribs to be the cause of asthma. I adjusted the ribs. The asthma vanished. It was simply an effect of abnormal articulation of the ribs with the transverse processes of the vertebrae. I found the cause of sick headache and fascial neuralgia to be equally simple. They could both be traced to a slip of one or more of the cervical vertebrae or a subluxation of the heads of the first ribs, shutting off the ascending vertebral artery and the venous drainage from the brain. I continued my explorations of the human body. I dissected to acquaint myself with the forms and function of every organ, its supply and drainage. I tried to acquaint myself with the mechanical and physiological processes of the whole body and I am happy to say I have found and repeatedly demonstrated that the body is a machine and can vindicate all its claims for health in the hands of a man or woman who knows the normal and the abnormal. With me it is

no longer a debatable question; if I fail to get the results desired, I am frank to say that my ignorance is responsible for the failure and not the ability of the body to vindicate the intelligence of its architect and builder.

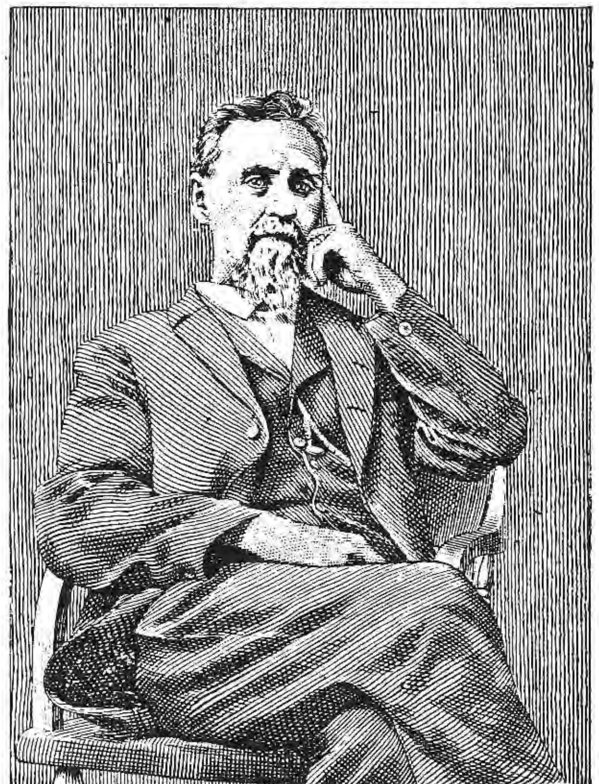
LENGTH OF TIME NECESSARY TO ACQUIRE THE FOUNDATION PRINCIPLES OF OSTEOPATHY

The question is often asked, "How long will it take a person to learn to do this work successfully?" In reply I will say that with a man or woman of ordinary intelligence, my observation has been that by close application under competent instructors, he will have obtained a comprehensive and practical knowledge of anatomy, physiology and the workings of the body in two years' time. He is then qualified and well prepared to take charge of and do successful work, provided he has been properly taught or is not a mental blank. I have been advised to make our school course longer than two years; to add another year and make it three.

I have been constantly in this service for the past thirty years. I think I know all the requirements of a competent osteopathic physician. My best operators have completed the school course and gone to work at the end of two years. They use no adjuncts and are unqualified successes. My opinion is, that after two years of constant application to his studies in my school, if he can show good grades, he is then as well qualified to begin practicing as he ever will be. He must learn much by experience.

Another point that I would make is that I think my opinion should be as well worth your consideration, after thirty years experience, as that of any man or boy who has gone out from our schools and has only devoted two or three years to the study and practice.

And as the discoverer and unfolder of the science of osteopathy, I will emphatically state that I consider a two years' course sufficient, if the work is confined to the essentials and all obsolete theories carefully excluded, the student attends strictly to his business, keeps out of billiard saloons and is well versed in all branches taught in the schools of our science which are to prepare him for the higher school of experience. The graduate should go to work at the end of the two years or he will lose many of the valuable principles that have been taught him before he has gotten hands and head to practice them until they became second nature, and he finds a proof in the results obtained. Thus I consider every day wasted to the serious detriment of the student, that he delays putting his knowledge into practice, after he completes his two years' course. If he begins on a third year the work assumes a monotonous routine and he begins to unlearn that which should have become a part of himself from frequent practice. At the end of the two years he should be master of the knowledge of the form and functioning of the human body and should be able to assume full charge of the engine of life and wisely direct it along its course. Again the average man or woman does not have the means to spend for an additional year. If I thought a student could not master the science in two years, I would tell him so and refuse his money. We need in our ranks only those qualified to do good work as osteopaths. Let us stand by our flag or quit! ■



A. T. Still.

More Than Mud, Mules & Manipulation

Scott Memorial Lecture
By Michael L. Kuchera, D.O., FAAO

PREFACE

Thank you for that introduction. I wish to also thank the American Academy of Osteopathy and the Kirksville College of Osteopathic Medicine for the honor and opportunity to present this special Scott Memorial Lecture. It's exciting to share my feelings about this profession with so many of my colleagues, my classmates, my students (past and present), and my friends and family here today. In recognition of Kirksville's Centennial Founder's Day (and today's weather), I have chosen for my title the question, "More than mud, mules, and manipulation?"

Before I actually start this talk, I wanted to share one brief story with you. Because of the historical importance of this lecture, I re-read all of the past Scott Memorial presentations. From that wealth of information, the 1972 Scott Memorial Lecture by **Viola Frymann**[1] has always stood out as a landmark contribution. The title of her lecture, "The Law of Mind, Matter and Motion," came from our profession's literature and echoed the words of A.T. Still:

"Osteopathy. How old is it? Give me the age of God and I will give you the age of Osteopathy. It is the law of mind, matter and motion.[2]"

I was determined to follow her lead and to base my inspiration for the Founder's Day lecture on a such a phrase from our past. Imagine my concern to find that by adopting "mind, matter, and motion," Dr. Frymann had already reserved most of osteopathy's best "M's". I found that I was left with "mud, mules, and manipulation!" None-the-less...

INTRODUCTION

The Scott Memorial Lecture is presented each year in Kirksville at the celebration of the founding of the first school of osteopathy. Its purpose is to make a contribution to teaching and to honor the philosophy and technique of our founder, A.T. Still. True to that charge, in our time together, I hope to use Dr. Still's technique of building allegories to illustrate how each of us can benefit from understanding the historical legacy of Kirksville as we help our profession move successfully into the future.

One hundred years ago today, Dr. Still founded the American School of Osteopathy in Kirksville, at that time a very small and very rural town of 5000 citizens. As was subsequently stated in the charter, the object of this college was (and I quote):

"...to establish a College of Osteopathy, the design of which is to improve our present system of surgery, obstetrics, and treatment of diseases generally, and to place the same on a more rational and scientific basis, and to impart information to the medical profession. . . "[3]

It is a testament to Dr. Still's belief in the application of the philosophy, science, and art of osteopathy, that he established such lofty goals for his college. With the founding of the American School of Osteopathy, A.T. Still offered both a unique philosophy and also Articles of Incorporation which stated that manipulation would be "the leading feature of this school"[4] contributing to the improvement of health care delivery. Dr. Still practiced what he preached and in 1895, just three years after the doors of the college were opened, the character of this city was described by its citizens as "Mud, Mules, and Manipulation."[5]

It is this phrase, "Mud, Mules, and Manipulation," that I have chosen as the title of this very special address to the profession. It is around this phrase that I hope to use Still's method of building allegory and analogy into a useful teaching tool to advance both the Kirksville tradition as well as the osteopathic philosophy into their second hundred years. It is my intention to show that there is a place in our second century and throughout the profession for the mud, the mules, and the manipulation that the citizens of Kirksville in A.T. Still's time witnessed, one hundred years ago. Lastly, I plan to issue a challenge to the profession based on this allegory.

THE KIRKSVILLE EXPERIENCE: PART I "MORE THAN MUD, MULES & MANIPULATION"

There's a lot less mud in Kirksville (I'm told) than there was when A.T. Still chose to plant his school here, but, thanks to the fertile soil and a good gardener, the roots of osteopathy have remained firmly grounded in Kirksville. The Kirksville "soil" has produced 13,500 D.O.'s[6], its 5,000 living alumni now represent nearly 1 out of every 5 D.O.'s practicing in the profession, and the fruit from this tree has been unbelievably good for the health of this nation. Constituting 5 % of US physicians, our profession cares for 10% of the US population (over 100 million patient visits per year) — often in areas where no other physicians are available.

Originating in America's rural heartland, the osteopathic profession knows how to grow and provide the staples necessary for good health. No other system of medical education has been as successful as osteopathy in inspiring students to choose primary care and to establish rural practices. With each graduation, the osteopathic "harvest" adds 1,500 caring, physicians, motivated and well-equipped to meet the country's medical demands where the need is great-

est.

Osteopathic seeds have been sown across the country and the fifteen American osteopathic colleges and a number of foreign schools can trace their roots to Kirksville. The nutrients fed through our roots have enabled the osteopathic profession to become the fastest growing segment in today's US health care system, fully recognized by the government for its unique health care delivery.

MULES

Kirksville has been a home to many a Missouri mule and Missouri mules are known for their single-mindedness. I think A.T. Still must have been part mule! It took a great deal of courage, conviction and perseverance to build the osteopathic profession in Kirksville. Of course, A.T. Still always did hold to his convictions. He fought against slavery and for women's rights. He even fought in his choice of a name for his new profession. Dr. Still stubbornly refused to listen to recommendations that he grant an M.D. degree, choosing instead to name his science "osteopathy" in order to have his graduates known for their unique approach to patient care. He realized that physicians from his school had a special legacy to contribute to the world.

As a proud profession we have stubbornly stood our ground when we knew we were right and while there aren't many four-legged mules left in Kirksville, the faculty at KCOM continues to teach osteopathic principles with conviction. As a former Scott Memorial Lecturer and friend, **Louise Astell, D.O.**, stated,[7]

"...in the long-term, the osteopathic concept will survive because true principles never die. They may be averted, submerged, even denied, but they will emerge again, stronger than ever. They have only to be applied every day in patient care to show how fundamental and timeless they are."

Nationwide, KCOM annually attracts more than 140 students who choose to come to this small, Midwestern town in order to learn to apply the osteopathic philosophy. Our graduates (part mule in their determination) persevere in building a positive name for their alma mater and, more importantly, for their profession.

MANIPULATION

Kirksville was (and is now) known for manipulation — and manipulation then opened many a door for the profession and its practitioners. Daily, numerous trains brought the sick and lame to Kirksville to allow A.T. Still, the "lightening bonesetter", and Kirksville's other osteopathic physicians to work their "magic". For those needing to commute to Kirksville for osteopathic manipulative treatment, the Quincy, Omaha, and Kansas City Railroad offered special "invalid rates" at less than half the price.

Students also flocked to Kirksville to learn Still's approach to health care and to learn osteopathic manipulative treatment. Dr. Still was not interested in training "a bunch of parrots" and cared less about teaching technique than in instilling principles. Students should take note...Anatomy scores in the 90th percentile were expected of those wishing to be taught to manipulate.

In his Philosophy of Osteopathy, in the section titled, "Most important chapter of all," Dr. Still chose another analogy in discussing the role of the osteopathic physician and his or her responsibilities. In his analogy:[8]

"The living person is the engine, nature the engineer, and you the master mechanic...at this point the engine of life is turned over to you as an engineer and by you it is expected to be wisely conducted on its journey."

He emphasized "that the word treat has but one meaning, that is to know you are right, and do your work accordingly."[9]

About osteopathic diagnosis and manipulative treatment, a few of Dr. Still's charges bear repeating:

"The fascia is the place to look for the cause of disease and the place to consult and begin the action of remedies in all diseases.[10] Your duty as a master mechanic is to know that the engine kept is in so perfect a condition that there will be no functional disturbance to any nerve, vein, or artery that supplies and governs the skin, the fascia, the muscle, the blood or any fluid that should freely circulate to sustain life and renovate the system from deposits that would cause what we call disease.[11] It is important to have perfect drainage, for without it, the good results from a treatment cannot be expected to follow your efforts."[12]

Manipulation continues to open doors for osteopathic practitioners and at state conventions. Our former students frequently thank their alma mater for the manipulative skills that have enabled them to establish busy practices where other physicians in their communities have struggled. Yet, while manipulation may open the door for our graduates, today's osteopathic physician must successfully integrate more than manipulation into his or her practice. Our educational system meets that requirement by graduating very unique practitioners. Strongly grounded in primary care, our generalists can take care of 95% of the problems confronting patients and can assess which specialist is best suited to handle the rest; our specialists are cut from this same generalist heritage and are equally capable of referring appropriately outside of their specialty.

Unfortunately, in the 1940's and thereafter, osteopathic manipulation as envisioned by our founder integrated into the treatment program of each patient - looked destined to go the way of mud and mules. As a profession, we deemphasized our differences, the most visible virtue being OMT. We educated a "lost generation" where manipulation was largely limited to the treatment of back pain and headache. The nonmanipulative aspects of applying our philosophy were inward and largely invisible to the lay public and, to some extent, to our own students; consequently, our profession has suffered in the past few decades from a certain lack of focus. According to AOA statistics and probably as a con-

sequence of the educational policies influencing the "lost generation", almost all of the manipulation done in our profession is delivered by DO's over the age of 65 or under the age of 44.[13]

Thus, while osteopathy is much MORE than manipulation, the lack of focus that came from deemphasizing OMT has significantly impacted the perception of the profession. Those practitioners educated in the years where a limited role for OMT was taught are currently in very prominent positions. For many, in both the public and within our own profession, this perception includes a lack of a unique identity. Without a clear identity, how does the public perceive us? How does the AOA promote what type of physician it represents? Where do our students get their role models? A few examples may help to illustrate these questions.

Several years ago, I recall being called to consult on a middle-aged woman who had suffered a myocardial infarction a few weeks before. She had been moved to the stepdown unit but was still having chest pains for which her physician was increasing her anti-anginal medication. This woman had a simple rib dysfunction which had probably occurred during the CPR that was performed when she first entered the hospital. With a few moments of indirect manipulative technique to restore normal rib motion, her "chest pain" was gone and the next day I found that she had been taken off the additional anti-anginal drugs and had been moved to a regular room. She was extremely grateful but then she asked me how long "chiropractors" had been allowed to practice at the our Osteopathic Hospital! Without giving it much additional thought, I began my standard public education reply; I told her that I was an osteopathic physician and that osteopathic manipulation was a part of all DO's training. Even though I am sure she realized that it was necessary to rule out continuing cardiac pathology, she asked the next obvious question, "Why hadn't her internist, the residents, and the other physicians on her case examined her for rib dysfunction and treated her" to save her the extra time, worry, and expense that resulted? While I struggled through an answer for her that day, her question still haunts me.

The question of why our profession doesn't consistently practice what it preaches is a puzzlement not only to our patients, but to our students as well. Thanks to the current osteopathic teaching model, today's osteopathic student has a complete understanding of the role of OMT in enhancing homeostasis in all patients and they have the skills to apply OMT in even very debilitated patients. But according to a 1989 survey,[14] while almost 90% of graduating osteopathic students intend to utilize OMT in their practices as they were taught, only 17% saw it utilized while on clinical rotations. This lack of consistency influences how osteopathic students perceive our profession. As an educator, I feel that this is the single greatest flaw in our educational programing and it constitutes a major hindrance with respect to the public's perception of osteopathic medicine.

Fortunately, the profession is overcoming this lack of focus. Quality osteopathic faculty have greatly advanced their collective understanding and the biomechanics involved in teaching the diagnosis and treatment of somatic dysfunction. Residencies in Osteopathic Manipulative Medicine have also sharpened professional awareness of the benefits of OMT in patient care. Thanks to the rapid growth of our profession, a new generation trained with a balanced educational model which incorporates OMT into all phases and types of osteopathic care is rapidly outnumbering those practicing the lost generation model. At this time, over 1/3 of our profession are still in educational programs and for those students, interns, and residents in the audience "You are our future!"

MORE?

Needless to say, we are more than the sum of our experiences; and while the tradition of mud, mules, and manipulation unite us in the mutual spirit of experience, it is our philosophy which unites us as a single body of practitioners. Our osteopathic philosophy, consisting of four tenets, unites us in our approach to life. We believe that a rational solution to any problem must incorporate approaches which enable the total unit to work as a whole down to its smallest parts; which rally intrinsic resources available for self-healing; and which maximize structure for certain functions while maximizing function within the existing structure.

These osteopathic tenets can be and should be applied beyond your approach to patient care. They are just as applicable in your approach to the environment, in your personal life choices, and in your approach to everyday problems. The ability to apply the tenets universally is a characteristic of the holistic philosophy. Practical and functional for the first century, the holistic philosophy of A.T. Still's osteopathy is ready for those who choose to embrace it, to guide us for another hundred years. Let it guide us as a profession in all of the choices that we must make.

THE KIRKSVILLE EXPERIENCE BEYOND KIRKSVILLE: PART II "THE CHALLENGE"

Yes, there is more. More than the 3 "M's" outlined in this allegory. The Kirksville experience now extends far beyond our city limits. The experience of "mud, mules, and manipulation" of A.T. Still's Kirksville has become enmeshed within the profession. Even today, this experience provides nutrients for our roots, inspires the steadfastness to persevere as a minority profession, and extends to us an incomparable skill to reach out to the body, mind, and spirit of each of our patients. Our legacy of "mud, mules and manipulation" provides a common resource and heritage that all graduates of all osteopathic schools share.

At this point in the Scott Memorial Lecture, any speaker would be derelict if he or she did not utilize the opportunity afforded by this podium

to issue a challenge to the profession and to each and every osteopathic student, physician, administrator, and faculty member.

I therefore challenge each of you to apply osteopathic solutions to the problems facing you and our profession and to devise and implement an osteopathic treatment program to promote optimal health to our profession in its second century of service. This is in keeping with the message that A.T. Still wanted us to hear and the banner that he wanted each of us to fly. Four years after the founding of his college, he addressed the profession and announced...

"I am satisfied that a revolution stands before you today, a healing revolution in the human mind..."[15]

Continue to support this revolution; apply the osteopathic philosophy of A.T. Still - let your decisions "revolve" around the four osteopathic tenets.

I challenge the body of the profession to work together as a unit. Each of you is an important part of the whole and health begins with the contribution that the smallest part plays. We must humbly recognize that none of us is more important than the other and that optimum health cannot be obtained unless we work together as a unit - united in mind, body, and spirit. There is no room for division, derision, or defensive posturing if we are to meet our potential in the second hundred years. The early generation, the "lost generation," and our new generation of osteopathic practitioners must share in promoting a common vision as each contributes their individual skills, insights, and knowledge towards achieving that vision and enriching each of its members.

I also challenge each of you to structure this profession according to the function which it has been destined to play. To do this we must recognize what our functions are and we must solve any continued identity crisis we have. When we look at curriculum, let's structure it to meet the functions demanded by an undergraduate osteopathic education. Let's recognize that our profession has a unique philosophy which must be applied in order to function as the unique form of health care that it is, and this philosophy must continue to encourage the development of generalist and specialist physicians who are strongly grounded in primary care and who are "osteopathic" first and foremost.

We need to realize that certain structures have served us well in developing the emphases that have brought us national accolades. As an example, our rotating internship was praised by the allopathic keynote speaker at a recent Graduate Medical Educational Leadership Conference and this educational structure has functioned to produce a high percentage of extraordinary primary care physicians. Let's not change a successful structure like our rotating internship just because the dominant school of medicine does it differently. Their graduate medical education structure has a very different function. Let's remain leaders in providing what this country needs most in the way of healthcare delivery.

Look around you at your portion of the profession. Is it structured to function efficiently; and as the function evolves, are you modifying structures to meet the new functional demand? Apply your osteopathic philosophy.

The third challenge that I make will require each of us to do some additional introspection. Our profession has a wealth of resources for self-healing. Do you possess or control some of those resources? Could you play an important role in helping to heal part of the profession? Don't squander those resources. Give freely of whatever time, skill, or material that you have. It is needed to advance this profession. Wise and selfless allocation of resources within the osteopathic profession is vital if we are to survive, grow, and succeed in this difficult period.

Lastly, as wise custodians of our resources, we must replenish the soil which has nourished our profession. Support your osteopathic alma maters, your district and state osteopathic associations, your specialty colleges, and osteopathic research. Contribute towards the health of our profession by providing whatever resources are needed and which you are capable of providing. We need teachers; we need researchers, philosophers, philanthropists, specialists and generalists; but most of all, we need all of you ... acting as a unit, as a single body sharing a common spirit. If we will practice our osteopathic tenets, those tenets we teach and know are true, our patients will be eternally grateful and our profession will continue to fulfill the mission that A.T. Still launched one hundred years ago in a town of "mud, mules, and manipulation." Thank you. ■

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2. Still, A.T.: "Dr. Still's address: Excerpts from an anniversary address delivered by Dr. Andew Taylor Still, in Memorial Hall Jan. 10, 1895," Early Osteopathy in the Words of A. T. Still, (Kirksville, Thomas Jefferson University Press, 1991), 47.

3. Walter, Georgia Warner: The First School of Osteopathic Medicine, (Kirksville, Thomas Jefferson University Press, 1992), 34.

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8. Still, A.T.: Philosophy of Osteopathy. by author, 1899, 218.

9. Still, A.T.: Philosophy of Osteopathy, (Kirksville, by author, 1899), 219.

10. Truhlar, Robert E.: Doctor A.T. Still in the Living, (Chagrin Falls, Ohio, by author, 1950), 104.

11. Still, A.T.: Philosophy of Osteopathy, (Kirksville, by author, 1899), 220.

12. Still, A.T.: Philosophy of Osteopathy, (Kirksville, by author, 1899), 219.

13. American Osteopathic Association: 1991 Yearbook and Directory of Osteopathic Physicians (82nd ed), (Chicago, AOA, 1991), 517.

14. Unpublished survey of over 500 members of the 1989 graduating classes of all osteopathic colleges conducted by a member of University of Health Sciences - College of Osteopathic Medicine.

15. Still, A. T.: "July, 1896: Anniversary celebration of the founding of Osteopathy," Early Osteopathy in the Words of A. T. Still, (Kirksville, Thomas Jefferson University Press, 1991), 70.

1993 CONVOCATION PROGRAM

"OSTEOPATHY & CHILDREN"

THE GRAND KEMPINSKI DALLAS

March 24-27, 1993

22 1/2 Hrs CME requested - Main Program
3 1/2 Hrs CME requested - Conclave
3 Hrs CME requested - Exhibit Visitation

Wednesday, March 24, 1993
"Our Littlest Patients"
History of Osteopathy in Treatment of Children Harold Goodman, D.O.
In Utero and Birth Trauma
Michael Lockwood, D.O.
The Newborn's Neuromusculoskeletal System - Maturation and Braincase Biophysics
Mark Bailey, D.O., Ph.D.
Organization of the Primary Respiratory Mechanism, Jane Carreiro, D.O.

Workshops
NICU and Preemies
Jane Carreiro, D.O.
Basic Percussion Techniques
Richard Koss, D.O.
Exam of Newborns
Catherine Kimball, D.O.
Neurodevelopment OT Perspective on Osteopathy
Christine Nelson, Ph.D.
Neurodevelopment OT Doman - Delcado
Richard Harrison, D.O.
Respiratory Infections and Osteopathic Treatment
Herbert Yates, D.O., FAAO
Exam of Infants and Kids
Hollis King, D.O.

Thursday, March 25, 1993
"Changing the Paradigm"
Models Paradigms and Medicine
David Crotty, D.O.
Brain Injury in Children
Carlisle Holland, D.O.
Neurometric Brain Mapping in Diagnosis of Mild Brain Injury, Learning Disability and Cognitive Impairment
Gerald Senf, Ph.D.
Expanding Osteopathic Concept as It Applies to Children
Viola Frymann, D.O., FAAO
UAAO Program

Friday, March 26, 1992
"Osteopathy and Preception"
Osteopathy and Preception
Cheri Quincy, D.O.
Perceptual Dysfunction
John Jones, D.O.
Children, Osteopathy and Environment
Mary Ann Block, D.O.
Neurotransmitters, Food and Behavior
Doris Rapp, M.D.
Sensory-Motor Integration and Childspace
Carla Reed, P.T.
Vision and the Delayed Child
Richard Glonek, O.D.
Music Therapy and Children
Barbara Crowe, M.Ed.

Workshops
Vision and Dysfunction of CNS and OMT
Richard Glonek, O.D.
Music Therapy and Osteopathy
Barbara Crowe, M.Ed.
OMT
Michael Cady, M.Ed.
Brain Mapping and OMT
Gerald Senf, Ph.D.

Saturday, March 27, 1993
The Osteopathic Role and Children's Health
Judith O'Connell, D.O.
Homepathy and Osteopathy in the Treatment of Children
David Hoffman
Preventive Medicine and Osteopathic Treatment of Children
Johannes Steenkampf, D.O.
The Future of Osteopathic Treatment of Children
Robert Fulford, D.O.
Conclave of Fellows Program
Raymond Hruby, D.O., FAAO, Program Chairperson
Leadership
The Role of Women in Osteopathic Leadership
Isabelle Chapello, D.O., FAAO
Osteopathic Leadership in the International Community
John Harakal, D.O., FAAO
Pride, Motivation and Leadership: What Can You Do?
Raymond Hruby, D.O., FAAO

LETTER TO A. T. STILL

Dear Doctor Still,

Of the several books you wrote, I think my favorite one is Philosophy of Osteopathy. At least, this is the book I go to most often when I want to read your words. This time, as I once again examined this book, I was especially curious about Chapter IV, "Ear Wax and its Uses." Now, I've read this chapter several times before, but this time I became particularly interested in why you would have devoted so much writing to such a topic as ear wax.

You asked a lot of questions regarding cerumen..."such as how and where is this wax made? Of what use is it? Why so awfully bitter? Has it any living principle above dry earth? Is it produced in the brain, lymphatics, fascia, heart, lungs, nerves or where? How much of it would kill a man? Would it kill at all? What is it made for? Is it used by nerves as food, or used by lungs, heart, or any organ as a active principle in the magnetic or electric forces?"

You also noted that the authors of medical and basic science texts of your time didn't have much at all to say about this bizarre substance. Yet you described several instances where patients were cured of various illnesses because of your osteopathic and your attention to the condition of their cerumen. So you spent quite a bit of time studying ear wax, reasoning that no substance existed in the human body without a definitive purpose. As you said, you wanted "...to observe and respect all nature and never be too hasty. To carefully explore all...never overlooking small packages as they often contain precious gems."

I must say that it seems there isn't much more knowledge about ear wax today than there was in your time. Little or nothing about this topic is found in current textbooks or literature. Perhaps someone will someday ask the questions you have asked, and take the time to solve the ear wax mystery once and for all. Ear wax may turn out to be nothing much at all, or we may find it to have effects we never would have imagined. Who knows? Maybe some osteopathic explorer will tell us.

Your ongoing student,

Raymond J. Hruby, D.O., FAAO

Anatomy, Asthma
continued from page 9

not used the inhaler in over three weeks and had never refilled the prescription. He had not had an attack in over three weeks. Now I was alone with only my hands.

I treated the thorax, the cervical, and the OA. I checked his cranial pattern and no dramatic changes had occurred. I balanced his abdominal diaphragm. A rather dramatic suprapubic tenderpoint was present. Iliac crests were equal and the pelvic extension test was negative. He continued to wheeze and scratch and panic. What had triggered the attack? Pollen? Grass? Heavy lifting? What was the main activity of his day working in the yard? Shoveling! Paul had a severely plantarflexed navicular in his left foot. Within less than 60 seconds the shortness of breath and wheezing dramatically stopped. I was flabbergasted. Then I remember Ken Johnson's articles on balancing the five diaphragms of the body that appeared in the Journal of the AAO.

Presently, Paul is off all medications. I treated him weekly for approximately 4 months. Now he gets monthly treatments. His attacks come more frequently, are extremely mild and are usually associated with emotional stress. He is almost an entire inch taller. His shoe size had increased by half a size. He has gained approximately 25 pounds to weigh 147 pounds. His posture is different. I have known Paul since the age of 11. The changes in him are the most convincing evidence that the human body is a unit and that the body as a vessel directly effects the expression of the soul inside. I also learned that some of the most effective OMT I have done has been on the people I love most. ■

UAAO Emphasizes Preceptor Program

The Undergraduate American Academy of Osteopathy faces the new century with a hearty respect for the Centennial of Osteopathic education. We feel that educated students become educated D.O.'s. Being the Centennial celebration, the Council's theme hopes to renew inspiration and respect for Osteopathic education. This year's theme will influences the short-terms agenda of our organization and helps inspire the ongoing long-term projects. This year, the Council developed a set of long range goals coordinating our activities with the Academy, our parent organization. Hopefully, the UAAO can aid in future growth of the Academy and the Osteopathic profession.

Being an osteopath is to be in a constant state of becoming osteopathy is a dynamic profession with tremendous growth potential. The Council and our collegiate chapters feel that practicing osteopathically requires an awareness of osteopathic history, principles, and research all in the context of American history.

To know osteopathic history without relation to the era in which it evolved is to live in a vacuum. New historical books by **Dr. Charles Still, Georgia Walter** and **Carol Trowbridge** add to the library of osteopathic literature. Luckily, many schools offer history courses as part of their curriculum. Access to history provides a sense of heritage and connectedness.

The Academy plans to update the **Vicki Dyson** Preceptorship Guide book. The UAAO Council proposed a method of facilitating the updating process of the **Vicki Dyson** Preceptorship guide that is made available to all UAAO members. The guide lists D.O.'s that are willing to accept students in their practice. The UAAO members use this guide for selecting externship rotations with physicians who integrate OPP into their clinical practice. Every Academy member participating in the **Vicki Dyson** Preceptorship program promotes osteopathic education. They serve as an inspiration for the next generation. The UAAO chapters hope to involve regional D.O.'s into the extracurricular programs in which they were previously unable to participate. The updated Preceptorship listing empowers students to obtain a more well-rounded osteopathic education.

Additionally, the UAAO Council plans to compile a student generated OPP Board Review Book to benefit UAAO members studying for Boards, Part I. The review book promotes continually between the osteopathic universities so that all osteopathic students can communicate. The need for a uniform OPP teaching model is a primary goal within our profession. UAAO hopes that by accumulating and disseminating each university's resources we can aid in educating and preparing osteopathic medical students.

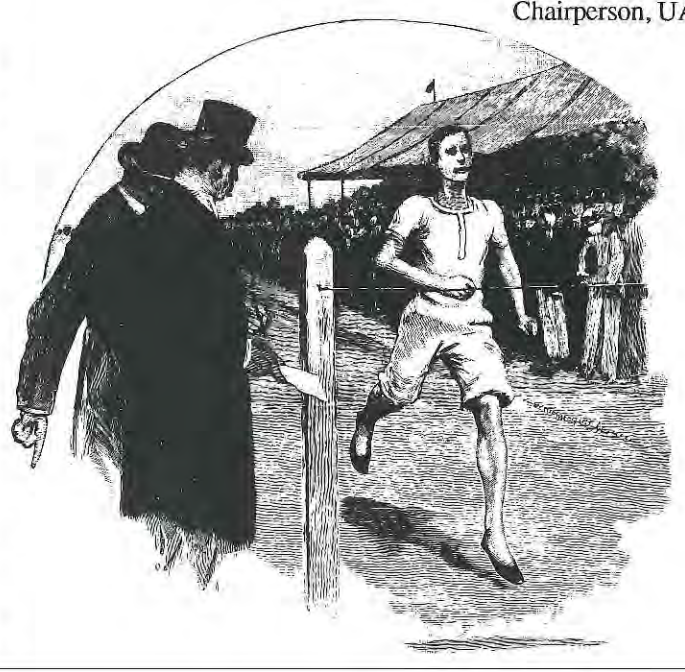
The Council members have instituted a project to retrieve and modernize archive journal articles. Each quarter, a Council member will find an article in a clinical area of their choosing. That article will be reviewed and updated by a osteopathic specialist in that field of medicine. The update will include diagnostics, medicines and treatment that includes new OMT techniques. The article will be submitted to the Academy for distribution to the internship and resident classes. We hope to eventually involve the National Undergraduate Teaching Fellows Association in the rescuing of Osteopathy's clinical archives.

This year's UAAO program at the AAO Convocation is the largest ever. Last year more UAAO members attended the Convocation than in history. Again this year, a fundraising auction will be held with large collector's items being auctioned such as a Legacy Osteopathy's greatest physicians. They pay tribute to our educators, healers and leaders.

Probably the grandest of the long range goals of the UAAO is to promote Osteopathic presence and visibility to our communities. A vast majority of Americans are unfamiliar with osteopathy and its unique place in American history. The union of osteopathy and the environmental movement provides a unique and unconventional method of educating the public. The Osteopathic Green movement has started small in the UAAO chapters and each university. Each chapter has been dispatched to develop a program best suited for their region. We hope to inspire the universities to incorporate the Osteopathic Green program into their public relations. Eventually, current environmental consciousness is bound to discover the difference a D.O. makes in the quality of health and living.

The challenge is for each Academy member to avail themselves to their undergraduate colleagues and to help us become the Osteopathic leaders of tomorrow. Each of you must remember a particular D.O. who exemplified the Osteopathic philosophy. The teaching physicians plays a dramatic, dynamic role in the cultivation of the next osteopathic generation. The torch is now being past that we practice as consummate D.O.'s thinking, living and practicing osteopathically. By your lead, the next generation of Osteopathic physicians shall follow. ■

In the Spirit of Still,
Elizabeth C. Sanders
Chairperson, UAAO Council



Obituary

Dr. A. Hollis Wolf

Dr. A. Hollis Wolf, 78, of Colorado Springs died Sept. 19, 1992. He practiced medicine in Colorado Springs for 50 years.

A memorial service will be held 2pm Wednesday at First Presbyterian Church, with the Rev. John H. Stevens officiating. Swan-Law Funeral Home is handling arrangements.

Dr. Wolf was born Oct. 7, 1913, in Big Timber, Mont., to Dr. and Mrs. Roy M. Wolf.

Dr. Wolf was a graduate of Northeast Missouri State Teachers College and Kirksville College of Osteopathic Medicine. He was past president of the Colorado Osteopathic Association and the American Academy of Osteopathy, and a member of the American Osteopathic Association and the American College of General Practice.

Dr. Wolf was chief of staff at Eisenhower Osteopathic Hospital and was licensed to practice medicine in Colorado, Arizona, Missouri and California. He was the author or numerous publications and was a board member and founder of the Colorado Springs Osteopathic Foundation.

Dr. Wolf served on the advisory board of the Martin Luther Church Homes, was a ruling elder with the First Presbyterian Church, was past president of the Colorado Springs Lions Club, and was a member of the Masonic Order, Consistory, Shriners, Garden of the Gods Club and the Winter Night Club. He also was a pilot.

Dr. Wolf is survived by his wife, Alice Bergner Wolf, two sisters, Laura Ruth Titus of Columbus, Ohio, and Mildred Hooper of Phoenix.

Memorial contributions may be made to First Presbyterian Church, 219 E. Bijou St., Colorado Springs 80903; or to the Colorado Springs Osteopathic Foundation and Family Medicine Center, 15 W. Cimarron St., Colorado Springs 80903.

Taken from; The Gazette Telegraph Sept. 21, 1992.

CLASSIFIED ADS

WANTED: D.O. for Full-time, tenure track, clinical faculty position in OMM. Successful candidates will have special interest and qualifications in the practice and teaching of osteopathic principals and manipulative medicine. Excellent fringe benefits. Research fac. avail. Rural environment with cultural advantages of university town. Start July 1, 1993. Application closing date is Jan. 1, 1993 or until the position is filled. For information call John C. Glover, D.O., Head, Section of OMM, at (614) 593-2257 wk., or (614) 592-2218 hm. Application may be made to William F. Duerfeldt, D.O., FAAFP, Chairman, Dept. of Family Medicine, Grosvenor Hall, Ohio University of Osteopathic Medicine, Athens, Ohio, 45701-2979. AA/EOE

ASSOCIATE WANTED!

Full or part-time. CMT practice. Washington, D C suburbs Cranial required. Acupuncture, percussion hammer, homeopathy desirable. Contact Harold Goodman, D.O (301) 565-2494.

WANTED: OSTEOPATHIC PHYSICIAN

Outstanding opportunity to practice Osteopathic Family Medicine in Wisconsin's fast growing, scenic Fox River Valley.

Current Practice Situation: Family practitioner with rapidly-expanding practice (the waiting time for new patient visits is four months) is looking for an osteopathic physician who is board-certified or board eligible in family practice. In addition to being both qualified and interested in performing osteopathic manipulative treatments—since that is a key component of the practice, you must be motivated to work independently, with little direction from other physicians. In return, you will have the freedom to develop your practice and patient base largely the way you want in a brand-new, well equipped 5K sqft. office setting.

$80K salary gurantee first year with $20K siging bonus, potential to earn $100-120K and more from first year on. Call Mary Shawn LaViolette, Practice Support Services for Novus Health Group, at 1-800-236-7772. Calls are answered 7 days A week between 6 AM and 10 PM (CST).

ASSOCIATE WANTED!

D.O. wanted to join growing OMT practice. Great location in Bethesda, Maryland, a suburb next to Wash. D.C.. Experience in cranial osteopathy necessary; percussion hammer experience preferred but not required. Call Lillian Somner, D.O. Day: 301-718-3696 Eve: 301-652-9172.

CALENDAR OF EVENTS

January 1993

Jan 15-17 — Massachusetts Osteopathic Society, Winter Convention, Lenox, MA. Contact Margaret Hogan, (508) 896-7247

Jan 15-17 — New Hampshire Osteopathic Assn. 2nd Annual Primary Care Ski/CME. Snowy Owl Inn, Waterville Valley, NH. Contact Alan C. Rogers, D.O., (603) 456-2178

Jan 28-31 — Florida, Pinellas County Osteopathic Medical Society, Winter Seminar. Holiday Inn Surfside, Clearwater Beach, FL. Contact Kenneth Webster (813) 397-5511

February 1993

Feb 13-14 — AAO Long Range Planning Committee

Feb 5-7 — AAO Education Committee Meeting, To be announced.

Feb 17-21 — Osteopathic Physicians & Surgeons of California 32nd Annual Convention, "Osteopathic Medicine—Into the 21st Century," Palm Springs Riviera Resort. M. Jay Porcelli, D.O., Convention Chair. 40 Category 1-A CME credits anticipated. Contact Matt Weyuker, Executive Director, at 455 Capitol Mall, Suite 225, Sacramento, CA 95814, (916) 447-2004, Fax: (916) 447-4828.

Feb 21-26 — AAO/Colorado Society of Osteopathic Medicine SKI/CME. Keystone Lodge & Resort, Keystone, CO. Contact Patricia Morales (303) 322-1752

March 1993

March 4-7 — AOCPM, American Osteopathic College of Preventive Medicine Midyear Conference, Chicago, Contact AOCPM, (404) 953-1803

March 4-7 — Florida Osteopathic Medical Association Annual Convention. Doral Ocean Beach Resort, Miami Beach, FL. Contact Stephen Winn, (904) 878-7364

March 12-14 — American Osteopathic College of Pathologists Midyear Tutorial. Holiday Inn Riverwalk, San Antonio, TX. Contact Joan Gross, (305) 432-9640

March 13-18 — American College of Obstetricians and Gynecologists Annual Conv. Hyatt Regency-Cerromar Beach, Dorado, Puerto Rico. Contact Barbara Hawkes, (313) 332-6360

March 17-21 — ACGP Annual Convention, The Peabody Hotel in Orlando, FL. Contact George A. Nyhart, (800) 323-0794

March 19-21 — American Osteopathic College of Anesthesiologists Mid-year Seminar, Chicago. Contact Bert M. Bez, D.O., (816) 373-4700

March 24-27 — AAO Annual Convocation, The Grand Kempinski, Dallas, TX

March 29-Apr 1 — AOA Trustees American Osteopathic Assn Annual Mid-year Meeting of the Board of Trustees, Mariott's Desert Springs Resort and Spa, Palm Springs

March 29-Apr 2 — Military, AMOPS Convention, Princess Hotel, San Diego, CA. Contact Robert A. Klobnak, (303) 670-8789

March 31-Apr 4 — Nevada Osteopathic Medical Assn. & Utah Osteopathic Medical Assn., Western States Osteopathic Convention, Alladin Hotel, Las Vegas Contact Alice Shultz, (800) 529-9906

April 1993

April 1-5 — American Osteopathic College of Dermatology Mid-year Conference, Vail, CO Contact AOCD, (404) 953-0802

April 14-18 — MAOPS National Osteopathic Health Conference, Westin Crown Ctr, Kansas City, MO. Contact MAOPS (314) 634-3415

April 15-18 — NJAOPS and NYSOMS joint Eastern Regional Osteopathic Convention, Bally's Park Place Hotel, Atlantic City, NJ. Contact Eleanore A. Farley, (609) 393-8114

DON'T SLEEP THROUGH THIS YEAR'S CONVOCATION

Theme:

- "Osteopathy & Children"
- The Grand Kempinski Dallas
- March 24-27, 1993

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