

THE AAO  
**JOURNAL**  
A Publication of the American Academy of Osteopathy

**TRADITION SHAPES THE FUTURE • VOLUME 10 NUMBER 3 FALL 2000**

Picture from Resource Book: # 4188

INSIDE THIS ISSUE:

**Philosophy,  
Science, &  
Art**

# AAO's CME Calendar

---

## 2000

### October

**13-15**

*Stimulated Ligament Reconstruction/  
Below the Diaphragm (Prolotherapy)*  
UNECOM in Biddeford, ME  
Hours: 20 Category 1A

**28**

*One-day "Hands-on" GI Workshop*  
Orange County Convention Center  
Orlando, FL  
Hours: 8 Category 1A

**29-November 2**

*AOA/AAO Convention*  
Orange County Convention Center  
Orlando, FL

### December

**1-3**

*Visceral Manipulation/Thorax/Dura*  
Holiday Inn Airport  
Indianapolis, IN  
Hours: 24 Category 1A

## 2001

### January

**11-14**

*Introduction to OMT/Counterstrain*  
Marriott Savannah  
Savannah, GA  
Hours: 23 Category 1A

**31-February 2**

*Myofascial Release:  
A new osteopathic model*  
St. Vincent Marten House Hotel  
Indianapolis, IN  
Hours: 20 Category 1A

### February

**2-4**

*Ligamentous Articular Strain*  
St. Vincent Marten House Hotel  
Indianapolis, IN  
Hours: 20 Category 1A

### March

**19-21**

*Visceral Manipulation Workshop  
(Emotional/Trauma)*  
The Broadmoor  
Colorado Springs, CO  
Hours: 24 Category 1A

**22-25**

*AAO Convocation*  
The Broadmoor  
Colorado Springs, CO  
Hours: 28-31 Category 1A

### May

**4-6**

*Prolotherapy/Above the Diaphragm*  
UNECOM  
Biddeford, ME  
Hours: 20 Category 1A

**18-20**

*New Advances in HVLA*  
Midwestern University/CCOM  
Chicago, IL  
Hours: 20 Category 1A

**19-20**

*Fulford Percussion Technique (Basic)*  
Renton, WA  
Hours: 14 Category 1A

### June

**1-3**

*Introduction to OMT/Muscle Energy*  
St. Vincent Marten House Hotel  
Indianapolis, IN  
Hours: 20 Category 1A

### July

**6-8**

*Osteopathic Considerations  
in Systemic Dysfunction*  
UNTHSC at Fort Worth/TCOM  
Fort Worth, TX  
Hours: 20 Category 1A

**28-29**

*Alleviation of Common, Chronic Pain  
by Optimization of Normal Posture*  
Chicago Marriott Downtown  
Chicago, IL  
Hours: 16 Category 1A

### August

**16-19**

*OMT Update at WDW®*  
Contemporary Hotel  
Buena Vista, FL  
Hours: 23 Category 1A

### September

**13-16**

*Introduction to HVLA Basic*  
Nugget Hotel  
Reno, NV  
Hours: 23 Category 1A

*The Still Technique: A Manipulative  
Method of Andrew Taylor Still, MD*

Nugget Hotel  
Reno, NV  
Hours: 23 Category 1A

### October

**5-7**

*Prolotherapy/Below the Diaphragm*  
UNECOM  
Biddeford, ME  
Hours: 20 Category 1A

**21-25**

*AOA/AAO Convention*  
San Diego, CA

### November

**30-December 2**

*Visceral Manipulation (Abdominal/GI)*  
St. Vincent Marten House Hotel  
Indianapolis, IN  
Hours: 24 Category 1A

---

For more information, contact:

**American Academy of Osteopathy®**

**3500 DePauw Boulevard, Suite 1080**

**Indianapolis, IN 46268-1136**

**Phone: (317) 879-1881 or**

**Fax: (317)879-0563**

**E-mail: AAODLF@aol.com**



3500 DePauw Boulevard  
Suite 1080  
Indianapolis, IN 46268-1136  
(317) 879-1881  
FAX (317) 879-0563

**2000-2001  
BOARD OF TRUSTEES**

- President  
John M. Jones, DO, III
- President Elect  
John C. Glover, DO
- Immediate Past President  
Mark S. Cantieri, DO, FAAO
- Secretary-Treasurer  
Boyd R. Buser, DO
- Trustee  
Stephen D. Blood, DO, FAAO
- Trustee  
Dennis J. Dowling, DO, FAAO
- Trustee  
Ann L. Habenicht, DO, FAAO
- Trustee  
Kenneth H. Johnson, DO
- Trustee  
Hollis H. King, DO, PhD, FAAO
- Trustee  
Melicien A. Tettambel, DO, FAAO
- Executive Director  
Stephen J. Noone, CAE

**Editorial Staff**

- Editor-in-Chief ..... Anthony G. Chila, DO, FAAO
- Supervising Editor     Stephen J. Noone, CAE
- Editorial Board ..... Barbara J. Briner, DO  
   Raymond J. Hruby, DO, FAAO  
   James M. Norton, PhD  
   Frank H. Willard, PhD
- Managing Editor ..... Diana L. Finley

*The AAO Journal* is the official quarterly publication of the American Academy of Osteopathy, 3500 DePauw Blvd., Suite 1080, Indianapolis, Indiana, 46268-1136. Phone: 317-879-1881; FAX: (317) 879-0563; e-mail AAOSJN@aol.com; AAO Website: <http://www.academyofosteopathy.org>

Third-class postage paid at Carmel, IN. Postmaster: Send address changes to American Academy of Osteopathy 3500 DePauw Blvd., Suite 1080, Indianapolis, IN., 46268

*The AAO Journal* is not itself responsible for statements made by any contributor. Although all advertising is expected to conform to ethical medical standards, acceptance does not imply endorsement by this journal.

Opinions expressed in *The AAO Journal* are those of authors or speakers and do not necessarily reflect viewpoints of the editors or official policy of the American Academy of Osteopathy or the institutions with which the authors are affiliated, unless specified.

THE AAO  
**JOURNAL**  
A Publication of the American Academy of Osteopathy  
TRADITION SHAPES THE FUTURE

**The mission of the American Academy of Osteopathy is to teach, advocate, advance, explore, and research the science and art of osteopathic medicine, emphasizing osteopathic principles, philosophy, palpatory diagnosis and osteopathic manipulative treatment in total health care.**

**Editorial Section**

From the Editor ..... 5  
*by Anthony G. Chila, DO, FAAO*

Letters to the Editor ..... 6

Message from the President ..... 9  
*by John M. Jones, III, DO*

In Memoriam ..... 10  
*Harold A. Blood, DO, FAAO*

Is a gift annuity right for you? ..... 11

Message from the Executive Director ..... 12  
*by Stephen J. Noone, CAE*

Affiliate Calendar of Events ..... 13

Dig On ..... 15

From the Archives ..... 16  
*Early thoughts of A. T. Still, Founder of Osteopathy*

**Peer-Reviewed Section**

The Role of Vibration or Oscillation in the Development of Osteopathic Thought ..... 19  
*by Zachary Comeaux, DO*

Carpal tunnel syndrome: more than just a problem at the wrist ..... 25  
*by Kenneth A. Ramey, DO*

Seated Flexion Test: A study questioning the need for the patient's feet on the floor ..... 28

Standing Flexion Test: ..... 29  
*by Robert E. Kappler, DO, FAAO*

An Ancient Persian High-Velocity, Low-Amplitude Thrusting Technique for Somatic Dysfunctions of the Thoracic Spine ..... 31  
*by Mohammad Namazian, OMS IV;*  
*Co-authors: Robert C. Clark, DO, MS and James Binkerd, DO,*

**Advertising Rates for the AAO Journal**  
*An Official Publication*

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

Call: The American Academy of Osteopathy  
(317) 879-1881 for more information.

Subscriptions: \$60.00 per year (USA)  
\$78.00 per year (foreign)

<i>Advertising Rates:</i>	<i>Size of AD:</i>
Full page \$600 placed (1) time	7 1/2 x 9 1/2
\$575 placed (2) times	
\$550 placed (4) times	
1/2 page \$400 placed (1) time	7 1/2 x 4 3/4
\$375 placed (2) times	
\$350 placed (4) times	
1/3 page \$300 placed (1) time	2 1/4 x 4 3/4
\$275 placed (1) times	
\$250 placed (4) times	
1/4 page \$200 placed (1) time	3 1/3 x 4 3/4
\$180 placed (2) times	
\$150 placed (4) times	
Professional Card: \$60	3 1/2 x 2
Classified: \$1.00 per word (not counting a, an, the)	

# Instructions to Authors

The American Academy of Osteopathy (AAO) Journal is a peer-reviewed publication 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. Letters must be signed by the author(s). No letters will be published anonymously, or under pseudonyms or pen names.

**Professional 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 Anthony G. Chila, DO, FAAO, Editor-in-Chief, Ohio University, College of Osteopathic Medicine (OUCOM), Grosvenor Hall, Athens, OH 45701.

## **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 three copies. 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.

5. Manuscripts must be published with the correct name(s) of the author(s). No manuscripts will be published anonymously, or under pseudonyms or pen names.

6. For human or animal experimental investigations, include proof that the project was approved by an appropriate institutional review board, or when no such board is in place, that the manner in which informed consent was obtained from human subjects.

7. Describe the basic study design; define all statistical methods used; list measurement instruments, methods, and tools used for independent and dependent variables.

8. In the "Materials and Methods" section, identify all interventions that are used which do not comply with approved or standard usage.

### **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.

### **Abstract**

Provide a 150-word abstract that summarizes the main points of the paper and its conclusions.

### **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 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.

### **Permissions**

Obtain written permission from the publisher and author to use previously published illustrations and submit these letters with the manuscript. You also must obtain written permission from patients to use their photos if there is a possibility that they might be identified. In the case of children, permission must be obtained from a parent or guardian.

### **References**

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).

## From the Editor

by Anthony G. Chila, DO, FAAO



# 2000-2001

As 19 colleges of osteopathic medicine begin their programs in a new academic year, 2000-2001, the 20th Century will close, and the 21st Century will begin. During the 20th Century, phenomenal progress has been made in the healing arts. The emergence and development of the osteopathic philosophy of health care has been a major contribution to this progress. In this issue, views of the Philosophy, Science, and Art of the profession are offered.

Debate continues about the "Death of Osteopathy". In Letters to the Editor, James S. Jealous, DO, offers his comment about his intention in presenting his 1999 Thomas L. Northup Memorial Lecture. Jeanne R. Roll, MD, has interesting observations about her own experiences in 20 years of Internal Medicine/Geriatrics practice. Dr. Roll's letter serves as a reminder that Andrew Taylor Still, MD, had in mind as his earliest intention to offer a method for the general improvement of the system of medicine. Charles E. (Ted) Findlay, DO, offers an international perspective to this debate. Dr. Findlay (OUCOM '85) practices in Calgary, Alberta, CANADA and is currently President of the Canadian Osteopathic Association. Osteopathy abroad is also addressed in Message from the Presi-

dent. John M. Jones, III, DO, comments on the Second International Symposium on Osteopathic Medicine in Russia.

Zachary Comeaux, DO, explores the roots of vibration and oscillation in the philosophical milieu of Drs. Still, Sutherland, and Fulford. The Role of Vibration or Oscillation in the Development of Osteopathic Thought is presented in numerous contexts. Kenneth A. Ramey, DO, discusses research, treatment, and management of Carpal tunnel syndrome: more than just a problem at the wrist. The history of manipulative techniques of the spine is ancient. A traditional technique practiced by Persian healers known as Shekastehband is described by Student Doctor Mohammad Namazian. Co-authored by Robert C. Clark, DO, MS and James Binkerd, DO, An Ancient Persian High-Velocity, Low-Amplitude Thrusting Technique for Somatic Dysfunctions of the Thoracic Spine surveys commonly used methods and discusses in detail the Persian alternative method. Robert E. Kappler, DO, FAAO, discusses the Standing and Seated Flexion Tests in two reports. Seated Flexion Test: A study questioning the need for the patient's feet on the floor analyzes results of this test performed on 100 subjects with feet dangling and feet

on the floor. Thirty subjects with unlevel iliac crests and a positive standing flexion test were observed in Standing flexion test study without and with shims added to level the iliac crests.

The Cranial Academy (an affiliate body of the American Academy of Osteopathy) published a Bibliography of Research Related to Osteopathy in the Cranial Field (OCF) in 1999. Dig on acknowledges this document for its value as an interdisciplinary assemblage of contemporary studies associated with traditional ideas.

The American School of Osteopathy opened its doors in 1892. The early years of teaching activity in the new system of Osteopathy were challenging, exciting and problematic. The personality of Andrew Taylor Still was the school's driving force. From the Archives presents selected comments of Dr. Still during the years 1894-1897.

Executive Director Stephen J. Noone, CAE reports that the AAO Board of Trustees successfully adopted a balanced budget for the 2000-2001 fiscal year. The passing of Harold A. Blood, DO, FAAO (President, 1965-1966) marks the loss of another of the AAO's giant figures. □



# Letters to the Editor

Dear Editor,

(Re: *Letter to the Editor, Vol. 10; No. 2; pp 6-8*)

I would appreciate your publishing this letter because Dr. Cummings has his facts wrong. In his article he made statements in reference to me that are incorrect.

1.) In paragraph one he states "as a board certified family physician, my perspective is certainly different from a physician specializing in manual medicine. I have never specialized in manual medicine. In 1970, I began an osteopathic rural practice. I made hospital rounds twice a day; house calls, office visits, and delivered babies plus had an E.R. in my office. In 1980, I became a clinical instructor in family medicine at NECOM. At one time in a small (400 person) rural town, there were 5 DOs doing osteopathic medicine treating all diseases and supporting osteopathic perspectives in clinical medicine. We all used our hands and our heads to do osteopathy wholistically. People came from all over because we spent the time to be complete and patients in most cases got well with less medicine, less diagnostics, and less cost. We were respected and loved for our difference and our style of practice. In 1995, I changed my life to include more teaching because my courses became very popular. I am an osteopathic physician who has seen 100,000 patient visits in an Osteopathic family practice setting. . . not as a manual medicine specialist. I have many more years of experience in family practice than Dr. Cummings.

2.) Dr. Cummings has taken a few courses with me. He has not studied with me in my office and has no idea how I handle individual cases.

3.) His conclusions such as "do we want to be primary care physicians on the fringe" . . . are based on misconceptions about the nature of my practice.

4.) I have trained family practice specialists from all over this country who do not find osteopathic care, using their hands, finding the Health, or taking the time a problem because many are serving their patients not running a business, per se. I can provide a list of 100 or more family physicians who would easily debate Dr. Cummings view from within his own "specialty". However, he does not feel the loss of traditional osteopathy, so the issue of the real debate does not apply in his case. Dr. Cummings has simply compartmentalized osteopaths and taken a narrow view of what hands-on osteopathy is all about. In fact, his generalizations prove the point of my lecture, osteopathy at its essential level has not been taught successfully and now we face shallow water. In his final sentence, he defines osteopathy's uniqueness as "an appreciation of the role of the musculoskeletal system in health" this is again a fragmentation, a positioning of a rational mind seeking justification. But, the truth remains that osteopathy is not allopathic thinking plus manual medicine. It is truly more. The "more" may now be only a historical truth having "evolved" into a less successful organism that has partitioned itself along lines of compromise leaving the public without access to a real choice.

5.) My lecture was about a deeply personal love for the essential nature of osteopathy and how one deals with the loss of something precious. One

might conclude that without this "fundamental fringe" the profession would evolve even more into a full MD format. One does wonder sometimes, if the "fringe" is being tolerated only because it can be used when justification of who we are as a profession becomes a social or political issue that might prevent our profession from being forced into merger! The "fringe" is not what Dr. Cummings assumes it is . . . manual medicine fundamentalist. There are many full-blooded DOs still in family practice that are as busy as Dr. Cummings, but apparently more osteopathic. We are primary care physicians who practice a true alternative to allopathic medicine. Perhaps for some this is inconceivable, perhaps for some it is only a dying fairy-tale, but for some it is a precious service to humanity ever embraced with our hearts.

Respectfully,

James S. Jealous, DO  
Franconia, NH

Dear Editor:

I would like to thank Dr. Cummings for his thoughtful response to Dr. Jealous regarding the 'death' of osteopathy. I wanted to write a rebuttal of my own, but did not know where to begin; now the task is much easier.

I am one of those MDs who, if given a chance to do it over again, would have attended a college of osteopathic medicine rather than an allopathic school. Unfortunately, I had no exposure to osteopathic medicine at the time when the critical education decisions had to be made. Looking back over my almost 20 years of internal medicine/geriatrics

practice, I realize now that I have always practiced along Dr. Still's integrated mind/body/spirit model. I was able to recognize when a patient's musculoskeletal system was not functioning properly but could not do anything with the findings other than the 'traditional' medication and off-to-the-physical-therapist approach.

Fours years ago, I had the extraordinary opportunity to work with a wonderful osteopath who joined our community health center system. My reactions to watching him at work with from "what IS this" to "wow, look at that" to "show me how" in very rapid sequence. Since then, I have amassed over 150 hours of formal training, some of it as courses offered by the American Academy of Osteopathy (AAO). The courses were both superb and of enormous use clinically. I have been able to restore motion to a patient's shoulder which had been immobilized for 2 years since a pacemaker insertion, simply by performing the Spencer technique. I successfully treated our past Health Center board "how the doctor performed magic on his arm". This tells me that osteopathy is not dead, rather it probably needs a different advertising campaign.

I have learned much in four years, however so much is out there, yet to be learned. I thank the AAO wholeheartedly for allowing those of us who possess the "wrong degree" to participate in their educational program. I look forward to the day when there will be one unified discipline wherein all of us provide the best integrated care possible for each individual, and all of us will be happy to be identified simply as DOCTOR. I do not think Dr. Still would mind too much. . .

Jeanne R. Roll, MD  
AAO Associate Member  
Internal Medicine/Geriatrics  
Oak Hall, VA



Dear Editor:

*RE: "Traditional" Osteopathy: An oxymoron?*

I have noticed the recent trend in this publication as well as others, to use the expression, "traditional osteopathy", but nowhere has this term been defined. I believe that its users feel that the provision of health care by osteopathic manual medicine alone is "traditional" osteopathy. This I believe to be a mistake, and one with potentially dangerous implications for the profession.

I was taught that the profession of osteopathy was founded by MDs, chief among them Dr. Andrew Taylor Still. These pioneers had the vision "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 . . ." <sup>1</sup> This is a goal that is as valid (and arguably untraditional) today as it was before the turn of the last century. They achieved this by eliminating from their therapeutic tool chest those methods that they knew to be ineffective, and adding those that they believed would be a significant advancement. They eliminated their use of those medications that they felt would be harmful or ineffective, most of the pharmacopeia of the day. They added the use of manual methods of treatment, and considered that this was a significant enough advance and unique method of treatment, that they preferred to be known by a new title, Doctor of Osteopathy. However, at no point did they as a profession throw away those methods of care that had proven their usefulness. Medications and surgery as well as obstetrics were practiced by the original founders of the profession, including Dr. Still, and they in fact established hospitals for the appropriate provision of these aspects of care. <sup>2</sup> In short, they were the most completely trained health care

providers in the world, and used any tools available to them to help restore and enhance the health of their patients. I hope that this remains the goal of osteopathic physicians today. If it is, then this is the real definition of "traditional" osteopathy, if such a thing can be considered traditional at all.

This issue has arisen in part because there are those in our profession that are seeking appropriate ways to interact with non-physician "osteopaths" outside of North America. I suspect that the use of the term "traditional" osteopath originated in those groups, as they sought ways to obtain approval from the established profession in the United States. But is the practice of manual therapy by itself without the capability to generate a complete diagnosis an appropriate use of the term osteopathy? Is this in fact a unique area of practice that warrants the use of a special title? In Canada we have many types of practitioners that use manual therapies, including osteopathic physicians, chiropractors, physiotherapists, massage therapists, and others. There are any number of massage therapy schools that teach their students the manual therapy techniques that originated within the osteopathic profession, as well as the philosophy of their application. Their students study from the same osteopathic textbooks of manual therapy that we do, often with the support of DOs as faculty members, and I suspect that the situation is the same in the United States. For the most part, these schools recognize that the manual therapies they teach are no longer unique to any one profession, and that they are not teaching osteopathy in the complete sense of the word. They do not call their graduates "osteopaths." Unfortunately, there is one school in Canada that does insist upon calling these graduates "osteopaths", specifically "traditional" ones.

There is a danger to the idea that

→

the application of osteopathic manual medicine and philosophy by itself is what defines a "traditional osteopath". If true, then this segment of knowledge is now shared by "osteopathic" physicians, "osteopathic" dentists, "osteopathic" chiropractors, "osteopathic" physiotherapists, and "osteopathic" massage therapists. The danger is that all of these practitioners will want to be recognized by the public and their governments and regulating bodies as "osteopaths". Is this in the public interest? Are our patients, especially those that are vulnerable at times of illness and need, sophisticated enough to be able to differentiate between an osteopathic physician (DO) and an osteopathic practitioner (DO)? This is a very relevant question as there are now graduates of this Canadian school that are practicing in the United States as "Osteopathic Physiotherapists", and those that are

expecting that they have a diploma that grants them recognition in the United States and elsewhere as "osteopaths".

The Canadian Osteopathic Association takes the concept of title protection very seriously, and believes that the title of "osteopath" or "osteopathic physician" belongs only to those that can provide a complete diagnosis and treatment plan, to include osteopathic manual therapy, as we see the definition of "traditional" osteopathy to be. We are working diligently, and with the support of the American Osteopathic Association, to see that this will prevail. There remains a need for legitimate debate within the American osteopathic profession as to how to interact with non-medical "osteopaths" internationally. At present, this debate is occurring within the Council on International Osteopathic Medical Education and Affairs, and it needs input from the profession as a whole. In the mean-

time, I urge caution on the part of those osteopathic physicians who wish to consider themselves to be, or wish to encourage the development of, "traditional" osteopaths, as if such a thing could exist at all.

Sincerely,

Dr. Ted Findlay, President  
Canadian Osteopathic Association  
Calgary, Alberta CA

## References

1. Walter GW, The First School of Osteopathic Medicine; A Chronicle, 1892-1992. Kirksville, MO, Thomas Jefferson University Press, Northeast Missouri State University, 1992
2. Cole, WV, The Development of Osteopathic Education and Research, Academy of Applied Osteopathy Year Book, 1958, Academy of Applied Osteopathy, Carmel, CA, 1958□

# Sutherland Cranial Teaching Foundation

1/2 page advertising -- black/white



## Message from the President

by John M. Jones, III, DO



Russia: land of mystery, romance and fear. To Americans of my generation, the great nation of Russia has represented these three things during our lifetime.

Fear, because for most of our lives we were in a cold war. Which is to say, constantly on the brink of war without ever going all the way. But think of this for a minute: we (the United States) have never been at war with Russia, or the USSR when it existed. We have had wars with Great Britain, Germany, Italy, Spain, and other nations, but never with Russia.

Russia was our ally during World War II, an ally which suffered horribly in ways we never comprehended, because the war did not touch us in the same way: on our own land, in our own cities. During that time, we assisted Russia both with war material and with joint planning to end the Nazi scourge.

After the war, our country remained almost untouched, with our manufacturing capabilities at a historical peak. Our allies and enemies were devastated, with the incredible task of rebuilding ahead of them. We helped with that rebuilding in the west, and our businesses benefited in a post-war economic boom. The USSR, however, was on her own.

The USSR became our main competitor, as they developed a nuclear arsenal and joined the space race. As a boy at this time, I knelt in the hall outside of my classroom, hands clasped over head, in air raid drills.

In Leningrad (formerly and once again St. Petersburg), boys and girls the same age were going through similar drills in case of an American air raid. Then Sputnik I became the first artificial satellite, and Yuri Gagarin became the first cosmonaut to orbit the earth. It became easy to picture an eventual war between our countries, a thought which Hollywood reinforced.

What a relief to be past the cold war-and hopefully living in a time when the US and Russian Republic can be allies again.

Mystery and romance centered on the history of the Russian Empire, the fall of the Czar, the different customs, the impenetrability of the iron curtain. We didn't know what was going on in Russia or the other socialist republics. We didn't know the Russians as people, because the iron curtain cut off travel and communication. In Pennsylvania, where I grew up, there were plenty of ethnic Russians; most didn't speak of that heritage. They were mixed with the Poles and the Ukrainians and other Eastern Europeans. Doctor Zhivago increased the Russian mystique when that movie came out. Tales of Rasputin, the history of Catherine the Great, the movie Nicholas and Alexandria gave us the idea that although Russia was now behind an iron curtain, it had not always been that way.

With communication open, osteopathy has spread to Russia and the other former Soviet republics. Viola Frymann, Melicien Tettambel, and I journeyed to Russia for the second time in two years, attending the Second International Symposium on Os-

teopathic Medicine in Russia, joined this year by Charles Crosby and his wife.

We stayed at a Russian hotel, contained in a modified portion of the building which used to hold their atomic energy commission's educational offices. The Russian School of Osteopathy is located in another wing of that building, headed by Tamara Kravchenko, MD. The students in this program are MDs who are taking part-time postgraduate studies in osteopathy. Nine graduates received their diplomas this year.

The school appears to have focused much of its research emphasis on cranial osteopathy for children. Two years ago, a Russian government official told the assembled group that the reason the government found cranial treatment so interesting was because there is such a high incidence of neurological deficiencies in newborns in St. Petersburg. He actually quoted a figure of 80% incidence, which we had a hard time believing. The name of Chernobyl was raised as a possible cause; however, folic acid supplementation is not used, there is a high level of alcohol consumption, and many births are induced, with one or two men putting direct pressure on the gravid abdomen during labor and delivery.

Yuri Moskalenko, a Russian academician and well-published author, had done critical research on intracranial hemodynamics for the Russian space program. He is now working with Viola Frymann and the Russian School of Osteopathy to demonstrate hemodynamic and other changes accompanying cranial osteopathic treat-

→

ment. He presented the results of some of his research at the 1999 Convocation of the AAO.

With the establishment of this school of osteopathy, Russia has joined the world community of osteopathic physicians and registry osteopaths, and will make unique contributions in areas where none of our schools have been able to provide some of the answers we seek. The difference in the amount of medication and technology available to the common patient encourages discovery in a hands-on, low-tech approach to treatment. The Russian School of Osteopathy is a governmentally recognized school, affiliated with the Secherov Research Institute.

Meanwhile, what an opportunity for American osteopathic physicians to learn about the Russian culture, make new friends, and see places we had not dreamed it would be possible to see in our lifetimes. To see the magnificent colors and beautiful architecture of St. Petersburg, to walk across Red Square viewing the contrast of the colorful or gilded onion-domed churches, the Kremlin and Lenin's tomb. We also saw much progress—in only two years' time—in the development of this country. And of course, there was the champagne, caviar, and the banquet and dance in the palace of one of the Czar's relatives, now a cultural center. We were indeed very privileged people in a country where poverty is common during the difficult transition from totalitarian communism to a democratic market economy.

In two or three years, there will be another international symposium in St. Petersburg. The Russians would welcome more American guests at that time. Following the osteopathic model, we know that in the world, as in the body, communication works best when there is free circulation and interconnection, and I encourage you to start thinking about the possibility of visiting Russia. □

# In Memoriam

## Harold A. Blood, DO, FAAO



Harold A. Blood was born at home in 1915, in Washington, D.C. His family physician as Lula Waters, DO, who treated him regularly for childhood maladies. The relief he received from the osteopathic manipulative treatments inspired him to try his own hand at healing, and he pursued osteopathic medicine at the Kirksville College (KCOM). Having graduated from medical school in 1939, Harold interned at Still Hildreth Sanitarium in Macon, MO, where he acquired a great appreciation for treating epilepsy and emotional disorders with manipulation.

Dr. Blood established a practice outside his hometown in Alexandria, Virginia, amidst discrimination from the established medical community. Applying to be a navy physician at the outbreak of World War II, his commission was denied because of his degree. In the 1950s, he and Dr. Felix Swope applied for hospital privileges and were turned away from 13 years. They were finally accepted on the staff because of laudatory letters written by MD colleagues who spoke highly of the quality of Dr. Blood's professional care. As the privileges were granted to him, hospital barriers against osteopathic physicians fell throughout the state. Harold often mused that he did not particularly care for practicing in the hospital, but instead wanted to insure the privilege for other members of his profession. Early in his own practice, his patients could count

on him to not only administer osteopathic manipulative treatments, but also to deliver babies and extract tonsils in his office. Later, Dr. Blood became trained and certified in proctology, also done in his office.

As his practice, his family, and his victory garden all thrived, Dr. Blood found interest with the American Academy of Applied Osteopathy (AAO), for which he served on the Board of Governors, Board of Trustees, and established the Osteopathic Treatment Service. Harold became president and treasurer of the AAO, president of the Kirksville Alumni Association, and eventually chairman of the KCOM Board of Trustees and later Alumnus of the Year. A past Scott Memorial and Northup Lecturer, he was an early Fellow of the AAO. His colleagues and good friends when he was an academy officer were Louise Astell, Dave Patriquin, Hollis Wolf, Margaret Barnes, John Goodridge, Sally Sutton, Paul Wilson and Fred Mitchell, Sr. Dr. Blood served on the Virginia State Board of Medicine for ten years and was the first osteopathic physician of that body. The American Osteopathic Association honored him the Distinguished service award, and the AAO honored him with the A. T. Still Medallion of Honor. KCOM honored him with a Doctor of Science of Osteopathy degree and the title Chairman Emeritus of the Board of Trustees. Following his retirement from private practice, Dr. Blood practice in rural Virginia communities and on an Arizona Indiana reservation doing volunteer medical work for five years.

He often said that the Academy members were the greatest people in the profession. □

# Is a Gift Annuity Right for You?

(Try this little quiz to find out.)

True or False

1. \_\_\_\_ I would like to make a gift to the American Academy of Osteopathy that would not only help the AAO, but provide me with income for the rest of my life.
2. \_\_\_\_ I would like to receive regular, fixed payments that I can count on.
3. \_\_\_\_ I would like to receive payments that may be as much or more than I might receive from other financial arrangements.
4. \_\_\_\_ I would like a portion of each payment I receive to be tax-free.
5. \_\_\_\_ I would like to receive an income tax charitable deduction for my gift.
6. \_\_\_\_ I would like to reduce the size of my estate to lessen (or avoid) estate taxes.
7. \_\_\_\_ I would like to know more about charitable gift annuities.

If you answered "True" to most or all of these questions, a gift annuity from the American Academy of Osteopathy may fit your needs perfectly. Use the coupon below to request further information. Or, call AAO's Executive Director, at (317) 879-1881. As always, your inquiry will be treated confidentially.

(Please complete and return this reply form.)

Dear Friends at the American Academy of Osteopathy:

\_\_\_\_ Please send me free literature about gift annuities.

\_\_\_\_ Please contact me about a personal visit or other assistance.

\_\_\_\_ I have provided for the Academy in my will or other estate-planning document.

\_\_\_\_ Please send me information about the American Academy of Osteopathy.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Mail this form to: American Academy of Osteopathy,  
3500 DePauw Blvd., Suite 1080,  
Indianapolis, IN 46268



## AAO Coding Information Packet

Please mail or FAX this form along  
with your order to:

American Academy of Osteopathy  
3500 DePauw Blvd., Suite 1080  
Indianapolis, IN 46268-1136  
Phone: (317) 879-1881 or  
FAX: (317) 879-0563

Send: \_\_\_\_\_ # of packets

@ \$15.00 each to:

Name \_\_\_\_\_

Street Address for UPS Shipment  
\_\_\_\_\_  
\_\_\_\_\_

City, State, Zip  
\_\_\_\_\_  
\_\_\_\_\_

Daytime Phone  
\_\_\_\_\_

FAX \_\_\_\_\_

### AAO Accepts MasterCard or Visa

Cardholder's Full Name  
\_\_\_\_\_  
\_\_\_\_\_

Card Number \_\_\_\_\_  
\_\_\_\_\_

Expiration Date \_\_\_\_\_

Authorized Signature  
\_\_\_\_\_  
\_\_\_\_\_

## Message from the Executive Director

by Stephen J. Noone, CAE



# What is a member's role in meeting the fiduciary challenges?

In the dog days of summer, the AAO leadership annually struggles with their fiduciary responsibilities. The Board of Trustees must maintain a balanced budget and replenish the Academy's reserves which were depleted by a decade of deficit budgeting as the AAO expanded its programs and services to members and the profession. The Education Committee wrestles with the dilemma of serving both the continuing medical education needs of AAO members and developing programs to assist other practice affiliates of the American Osteopathic Association in addressing the call to better integrate osteopathic principles and practice in the seamless curriculum of osteopathic medical education. I can testify to the fact that your AAO leaders have taken their responsibilities seriously in their meetings this summer. I hope the following observations will enable you to better understand their ongoing dilemma and learn how members can actively participate in responding to the challenges.

The Board of Trustees successfully adopted a balanced budget for the 2000-2001 fiscal year and have dedicated one percent of the projected income for investment in AAO reserves as directed in the Strategic Plan. This represents the third consecutive year that the Trustees have achieved the feat. However, there are programs and services which continue to be unfunded. While the Board authorized the yearbook editor to proceed with development of a new publication, the Academy will not publish it in this fiscal year. The Long Range Planning Committee will forego

a planning retreat and conduct unfunded interim meetings only at the AOA Convention and AAO Convocation. The AAO Governors will not receive a per diem to cover their expenses associated with meeting the day prior to the opening of AAO Convocation. Budgets for the work of AAO committees permit chairperson minimal latitude for unanticipated expenses during the fiscal year. Some publications, which are out of stock or close to back order, will not be reprinted during this fiscal year. Finally, for several years now, the Academy's Visiting Scholars program has failed to receive an appropriation.

The Education Committee devoted the lion share of its weekend meeting to a thorough analysis of the performance of the Academy's CME programs over the past several years. They noted that some very worthwhile educational programs actually cost the Academy more than the AAO generated in revenues from tuition and grants. After thoroughly reviewing their assigned goals from the Academy's Strategic Plan, they addressed key questions, such as: Should the Academy continue to sponsor 18 CME programs annually? Are we offering the "right mix" of educational experiences? Can AAO members realistically support this number of educational seminars? Should the AAO continue to sponsor CME courses designed to attract physicians from the broader profession? To whom should we market our educational programs? There were no easy answers. However, the Committee canceled two courses from its preliminary 2001 calendar and adjusted the tuition levels for students, interns and residents to better reflect the ac-

tual cost of education.

The harsh reality is that the Academy is a very small membership organization within the broader osteopathic medical profession. But, the expectations (from AAO members as well as the entire profession) are disproportionate to its size. In my opinion, we can only meet the increasing demands by generating significant additional revenue. The good news is that there is huge potential for more revenue when one considers that less than 1,600 of the nation's more than 45,000 osteopathic physicians have made the decision to support the Academy with their membership dues. *Have you recruited a new member lately?* Furthermore, with few exceptions, there is ample space in the Academy's CME programs to accommodate many more physician registrants. *Have you invited a colleague to accompany you to an AAO course or encouraged that colleague to take advantage of these unparalleled educational opportunities?*

The AAO leadership has demonstrated once again that it can handle its fiduciary responsibilities effectively. They have done so without significantly increasing membership dues or tuition to AAO educational programs. They have not burdened AAO members with assessments or new fund raising appeals. The Academy's future is as much in the hands of its rank and file members as in the leaders' hands. You can help to assure that future by making the decision today, tomorrow, and throughout the year to recruit colleagues to AAO membership and invite them to attend the Academy's quality, hands-on CME programs. □

# Affiliated organization's CME calendar

## September 20-23

*Fourth Annual Board Review*  
NJAOP&S  
Mt. Laurel, NJ  
Hours: 31 Category 1A  
Contact: Lora Donia  
856/566-6330

## September 20-24

*Osteopathy for the Ages:  
A Manipulative Update*  
KCOM  
Kirksville, MO  
Hours: 40 Category 1A  
Contact: Rita Harlow  
660/626-2232

## October 12-15

*New England Osteopathic  
Association Fall CME*  
Cambridge, MA  
Contact: NEOA  
(207) 283-0170 ext. 2589

## November 11

*The OMT Review and Practicum Series:  
II. Osteopathic Manipulative Treatment:  
Pelvis*  
Biddeford, ME  
Hours: 12 Category 1A  
Contact: UNECOM, Office of CME  
(207) 283-0170 ex. 2580

## April 23-26, 2001

*79th Annual Convention*  
Arizona Osteopathic Association  
Contact: AOMA Office  
888-266-6699

## May 18-21, 2001

*NeuroFascial Release Conference;  
a new paradigm in osteopathic thought*  
Arizona Academy of Osteopathy  
Contact: Steve Davidson, DO  
(800) 359-7772

## AAO offers an 8-hour CME Program

# *An Osteopathic Approach to Diagnosis and Treatment of Gastrointestinal Problems* **Saturday, October 28, 2000**

- 8:00 am - 5:00 pm •
- Orlando Convention Center •
- Orlando, FL •

*This program will be held just prior to the American Osteopathic Association's Annual Convention and Scientific Seminar. It is a sample of the five CME programs designed to assist directors and medical educators in the challenge to integrate osteopathic principles and practice into the seamless curriculum in osteopathic medical education*

*All programs are taught by CERTIFIED clinicians with excellent teaching skills. Table trainers with this background cover no more than six tables to provide prompt feedback, guidance, and answers to clinical questions.*

### Registration Form

#### An Osteopathic Approach to Diagnosis and Treatment of Gastrointestinal Problems

Full Name \_\_\_\_\_

First Name for Badge \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Office phone # \_\_\_\_\_ Fax #: \_\_\_\_\_

AOA # \_\_\_\_\_ College/Yr Graduated \_\_\_\_\_

**Registration Fee: \$250.00**

AAO accepts Visa or Mastercard

Credit Card # \_\_\_\_\_

Cardholder's Name \_\_\_\_\_

Date of Expiration \_\_\_\_\_

Signature \_\_\_\_\_

# VISCERAL MANIPULATION THORAX/DURA

## DECEMBER 1-3, 2000

(FRIDAY -SUNDAY)

## INDIANAPOLIS, IN

### Hotel Information:

**Holiday Inn Select-Airport**

2501 South High School Road

Indianapolis, IN 46208

Phone: (317) 244-6861 (Reservation line)

(Identify yourself as attending

American Academy of Osteopathy's Conference)

**AAO Rate: \$ 95 single/double**

**Reservation Deadline: Nov 1, 2000**

**Hours: 24 Category 1A**

### Course Description:

- Lungs •Pericardium •Bronchi •Ribs •Acromioclavicular joint •Sternoclavicular joint •Sternum
- Subclavius muscle •Soto-Hall test •Esophagus •Dura •Cervical-brachial plexus •Sciatic nerve

In this course, viscera conceptions in the deeper visceral structures of the thorax are explored. Since these are more protected by the thoracic cage, they can be more difficult to accurately diagnose and treat. Labs will emphasize evaluation of the participants' palpatory diagnoses by the instructors. At this level, participants generally begin to find that they can more consistently predict patient's symptoms, based on physical diagnosis (palpation). A very fast and precise cranial evaluation is presented. Direct treatment approaches to the sutures, membranes, dura (up to and including the eyes, foramen magnum), upper cervical spine, lower thoracic spine, S2, and the coccyx are included.

Relevant diagnoses covered are recurrent respiratory infection, chronic bronchitis, prior respiratory infection with resultant pleural scarring, asthma, recurrent upper thoracic pain, sciatica, radiculopathy, compromised respiration, coronary tension, CHF, chronic pain syndrome, recurrent sternal restrictions, and chronic chostochondritis

*Kenneth Lossing, DO, Program Chair and Instructor*

### REGISTRATION FORM

### Visceral Manipulation/Thorax/Dura

**December 1-3, 2000**

<p>Full Name _____</p> <p>First Name for Badge _____</p> <p>Street Address _____</p> <p>_____</p> <p>City _____ State _____ Zip _____</p> <p>Office phone # _____ Fax #: _____</p> <p>AOA # _____ College/Yr Graduated _____</p> <p><b>I require a vegetarian meal <input type="checkbox"/></b></p>	<p><b><u>REGISTRATION RATE</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;"><u>Prior to 11/1/00</u></th> <th style="width: 20%; text-align: center;"><u>After 11/1/00</u></th> </tr> </thead> <tbody> <tr> <td>AAO Member</td> <td style="text-align: center;">\$595</td> <td style="text-align: center;">\$695</td> </tr> <tr> <td>AAO Non-Member</td> <td style="text-align: center;">\$695</td> <td style="text-align: center;">\$795</td> </tr> </tbody> </table> <p><u>AAO accepts Visa or Mastercard</u></p> <p><b>Credit Card #</b> _____</p> <p>Cardholder's Name _____</p> <p>Date of Expiration _____</p> <p>Signature _____</p>		<u>Prior to 11/1/00</u>	<u>After 11/1/00</u>	AAO Member	\$595	\$695	AAO Non-Member	\$695	\$795
	<u>Prior to 11/1/00</u>	<u>After 11/1/00</u>								
AAO Member	\$595	\$695								
AAO Non-Member	\$695	\$795								

**Call American Academy of Osteopathy for more information:  
(317) 879-1881; Fax: (317) 879-0563; or E-mail: AAODLF@aol.com  
Visit the Academy's Website: <http://www.academyofosteopathy.org>**

# Dig On!

Readers who noted Dr. Kenneth E. Nelson's response to Dr. James M. Norton's letter (*The AAO Journal*, Volume 10, Number 2, Summer 2000) were made aware of many avenues of activity currently underway within the osteopathic profession to address research concerns. Dr. Nelson also offered cogent criticism both in regard to the studies cited by Dr. North and the obligation of the osteopathic profession to demonstrate its commitment to better assessment and understanding of Osteopathy in the Cranial Field (OCF).

The Cranial Academy (an affiliate body of the American Academy of Osteopathy) published A Bibliography of Research Related to Osteopathy in the Cranial Field (OCF) in 1999. The opening paragraphs of this document are quite relevant to this dialog:

"This bibliography has been collated and published for use by scientists whose research related to Cranial Osteopathy. Also, the clinician pressed to provide "proof" of their application of Cranial Osteopathy may find reassurance that there is credible research on, and in some cases, verification of the phenomena with which they work daily.

The works of many people are in-

cluded in this bibliography. The current impetus to publish this document grew out of the work of The Cranial Academy Foundation, which along with the Sutherland Cranial Teaching Foundation and the New York College of Osteopathic Medicine, sponsored a research symposium on the Primary Respiratory Mechanism (PRM) in September 1998. Preparation for the symposium included the development of a comprehensive bibliography on the subject. Since the symposium, more research has come to light. It appears that the bibliography will be a constantly growing document, and the present edition is not deemed definitive by any means."

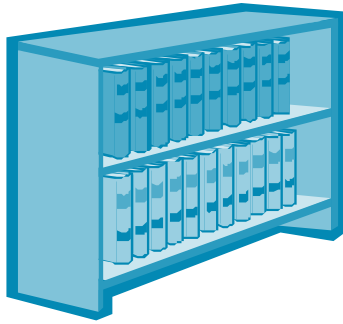
(Version 1; June 1, 1999. This document is available from: The Cranial Academy, 8202 Clearvista Parkway, Suite 9-D, Indianapolis, IN 46256).

As a participant in the 1998 PRM symposium, I received the workbook of 33 articles and 15 abstracts of the available scientific work related to Osteopathy in the Cranial Field. The compilation was done by Drs. Hollis H. King and R. Paul Lee. This assemblage of published material was felt to represent that which would be most applicable in facilitating the purpose

of the Research Focus Group meeting. One section of the workbook contained articles organized around the Cranial Concept and Primary Respiratory Mechanism. Relevant material was presented for association with 4 of the traditional components of the concept: The inherent motility of the brain and spinal cord; The fluctuation of the cerebrospinal fluid; The mobility of mobility of the intracranial and intraspinal membranes; The articular mobility of the cranial bones. No articles directly related to the involuntary mobility of the sacrum between the ilia were found.

The strength of the literature search prepared for the 1998 symposium lies in its interdisciplinary constitution. Contemporary medical technology is well represented and demonstrates association with traditional ideas. The challenge to the osteopathic profession may well be to accomplish a synthesis of this (and future) information which will provide an infrastructure for the conduct of clinical studies of palpatory phenomena associated with the Cranial Concept and Primary Respiratory Mechanism.

Anthony G. Chila, DO, FAAO  
AAOJ Editor in Chief



**[Editor's Note:** *In anticipation of the year 2001, it is very appropriate to review some of the early thoughts of A. T. Still, Founder of Osteopathy. The following selections are taken from Addresses given at Memorial Hall by Dr. Still during the years 1894-1897. The source for all of the selections is Autobiography of A. T. Still (copyright 1897 by A. T. Still): Kirksville, MO, June 15, 1897]*

## Address by Dr. A. T. Still to His Students and Diplomates:

### May 7, 1894

“At the threshold of your osteopathic duties you have the supreme satisfaction of knowing that you are confronted with a science. By a systematic, rigid adherence to its never failing laws you will ever prove an honor to yourself, a blessing to this school and a benefactor to mankind. You should ever remember that osteopathy adheres strictly to the well defined and immutable laws of nature, and it is an unerring Deity who wills it so.”

### January 14, 1895

“Motion begins in the human foetus at about four and one-half months after conception. Activity of the osteopathy begins at about the same date.”

“Either God is God or He is not. Osteopathy is God's law and whoever can improve on God's law is superior to God himself. Osteopathy opens your eyes to see and see truly; it covers all fields of diseases and his the law that keeps life in motion.”

“We take up 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.”

“You wonder what osteopathy is; you look in the medical dictionary and find as its definition, bone disease. That is a grave mistake. It is compounded of the two words, Osteon, meaning bone, Pathos - Pathine, to suffer. Greek lexicographers say it is a proper name for a science founded on a knowledge of bones. So instead of bone disease, it really means bone usage.”

“God manifests himself in matter, motion, and mind. Study well his manifestations.”

### January 20, 1895

“The great inventor of the universe, by the union of mind and matter, has constructed the most wonderful of all machines – man – and osteopathy demonstrates fully that he is capable of running it without the aid of whisky, opium, or kindred poisons.”

### March 12, 1895

“We find all the machinery, qualities, and principles that the Devine Mind intended should be in man. Therefore, let me work with that body, from the brain to the foot. It is all finished work, and is trustworthy in all its parts.”

### April 25, 1895

“The mechanism is perfect, the material used is good, the supply sufficient, the antidotes for all frictions, jars, or discords are found to exist in sufficient quantities to the materials selected; and the process through which they pass, after the machine is put in motion and properly adjusted, to maintain active, vigorous life, is marvelous. Man, the most complex, intricate, and delicately constructed machine of all creation, is the one with which the osteopath must become familiar.”

“The point I wish to have you bear in mind is this, that to be an osteopathy, you must study and know the exact construction of the human body, the exact location of every bone, nerve, fiber, muscle, and organ, the origin, the course and flow of all the fluids of the body, the relation of each to the other, and the functions it is to perform in perpetuating life and health. In addition, you must have the skill and ability to enable you to detect the exact location of any and all obstructions to the regular movements of this grand machinery of life.”



## June 22, 1895

“In the past, I stood and watched four physicians, the best the medical schools could furnish, battle with all their skill against the dread disease of cerebro-spinal meningitis in my family. I found prayers, tears, and medicine all unavailing. The war between life and death was a fierce one, but at the close of it three lifeless bodies lay in my desolate home. In my grief, the thought came to me that Deity did not give life simply for the purpose of so soon destroying it – such a Deity would be nothing short of a murderer. I was convinced there was something surer and stronger with which to fight sickness than drugs, and I vowed to search until I found it. The result was that in 1874, I raised the flag of osteopathy, claiming that ‘God is God, and the machinery He put in man is perfect.’”

“For twenty-one years I have worked in osteopathy, yet I keep my throat ever ready for the swallowing of new things that constantly appear in it. I expect to live and die fighting for principle, and shall pay no attention to the twaddle of opposition, merely regarding it as a fertilizer of my work by a fine quality of ignorance. The osteopath who keeps his eye on the science, and not on the almighty dollar, will be able to control all forms of disease.”

“This, the 22nd of June, is the anniversary of the child of osteopathy, the child of which I am justly proud.

And, today, on its coming of age, I am happy and welcome you gladly. On each successive year that I live, I hope to meet you here and tell of even greater advancement along these lines.”

## June 4, 1896

“An osteopath must know the shape and position of every bone in the body, as well as that part to which every ligament and muscle is attached. He must know the blood and the nerve supply. He must comprehend the human system as an anatomist, and also from a physiological standpoint. He must understand the form of the body and the workings of it. That is a short way to tell what an osteopath must know.”

“At every stroke of the Master Architect of the universe, you will see the proof of intelligence, and His work is absolute.”

## June 22, 1896

“Twenty-two years ago, I took up the matter solemnly and seriously. Since that time, I have not lost a wakeful hour without my mind being engaged with the construction of man, to see if I could detect one single flaw or defect in it – either under the microscope, or with the anatomist’s knife, or the rules of philosophy of my own or the minds of others. I have never yet been able to detect the least shadow of confusion.”

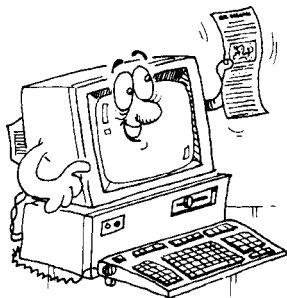
“Having followed this science for twenty-two years, I am fully con-

vinced that the God or nature has done His work completely. I am satisfied that a revolution stands before you today – a healing revolution, a revolution in the human mind that will result in the study of anatomy in our district schools and colleges. It is one of the most important studies for all the schools.”

For twenty-two years, I have been looking at the parts of the human engine, and I find it is a most wonderfully constructed engine, with the intelligence of mind and the spirit of God from the crown of the head to the soles of the feet. I believe that is God’s medical drug store, and that all cures of nature are in the body.”

## August 6, 1897

“I am glad to meet you here on my birthday. I do not expect to have many more such celebrations. I am now sixty-nine years old; next year makes seventy. My father died at seventy-one, my mother at eight-nine. As long as I live I shall be an uncompromising defender of osteopathy. I don’t need much of it myself, as I am pretty well, but for the sake of the cripples, I will try and give a few lessons as to how often they should take treatment and when to quit. I hope for a brilliant future for osteopathy. When I am dead, if I get to come back here, I expect to see osteopathy ahead of all other ‘pathies’, and men growing up with better minds, brains, nerves, and better all over. I thank you for your attention.”□



Visit the  
**American  
Academy of Osteopathy’s**  
Home on the Internet  
<http://www.academyofosteopathy.org>

# OMT Review (Second Edition)

## *A Comprehensive Review in Osteopathic Medicine*

by Robert G. Savarese, DO

### Features:

- 178 exam-type questions.
- 65 COMLEX style questions.
- Important facts highlighted throughout the text for last minute cramming.
- Reflects student experience on 1998 COMLEX exams.
- Easy to read outline format.

### From AAO Journal, Fall 1998:

- "Savarese very neatly and logically puts together two years worth of functional anatomy, basic neurology and osteopathic somatic diagnosis. It is clear, concise, easy to understand without being overly simplistic, and information is easily accessed."*
- ".. a wonderful board reference."*

### Order Information:

OMT Review @ \$22.95 + \$6 S/H in U.S.

(NOTE: Please add \$1.00 for each additional book ordered.)

Total \$ amount of order: \_\_\_\_\_

Shipping Information:

Name \_\_\_\_\_

Street Address \_\_\_\_\_

(NO P.O. Box #s)

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_

### Payment Information:

VISA     MC     CHECK

Card No. \_\_\_\_\_

Expiration Date \_\_\_\_\_

For your copies, contact:

**American Academy of Osteopathy®,**

**3500 DePauw Blvd.,**

**Suite 1080, Indianapolis, IN 46268-1136;**

**phone: (317) 879-1881; FAX: (317) 879-0563**

## PHYSICIAN

A full-time faculty position is immediately available for a board-certified/board eligible Doctor of Osteopathy at the University of North Texas Health Science Center-Texas College of Osteopathic Medicine in Fort Worth.

Teaching osteopathic manipulative medicine is required. Clinical and research opportunities are available. Competitive salary and excellent benefits package. Letters of interest should be sent to:

Scott T. Stoll, DO, PhD  
Interim Chairman/Assistant Professor  
c/o Elisa Bircher  
University of North Texas Health Science Center  
3500 Camp Bowie Boulevard  
Fort Worth, Texas 76107-2699

817-735-2461 • Fax 817-735-2270

An EOE/Affirmative Action Employer

FIMM  
Ad.  
Film  
enclosed

# The Role of Vibration or Oscillation in the Development of Osteopathic Thought

by Zachary Comeaux, DO, Athens, OH

## Abstract

*The osteopathic definition of the person is the key to osteopathic science. Dr. Still encouraged us to bring philosophy into clinical practice. Following his inclination, Robert Fulford developed an energetic concept of the person and developed various effective clinical approaches including percussion vibration.*

*Vibration or oscillation has been used as a component of diagnosis and treatment in various forms since the beginning of osteopathy. Besides the instinctive application of rhythm as an aspect of motion, vibration has a special place in the development of a cosmology in which to interpret the state of the patient.*

*This article follows the roots of vibration and oscillation in the philosophical milieu at the time of Still, Sutherland, and Fulford, including various levels of influence from Herbert Spencer and Walter Russell. The specific application of the use of vibration in numerous contexts is explored.*

*The role of oscillatory processes in the further elucidation of somatic dysfunction and the neuromuscular physiologic explanation available in conventional science is introduced.*

## Introduction

On the surface, the Percussion Vibratory Techniques of Robert Fulford seem unusual and as representing a philosophically insular approach, perhaps not really osteopathic manipulation at all. What makes a technique Osteopathic? The current panoply of manipulative techniques challenges one to recall the unifying focus in theme and conviction of the founder, Dr. Still, namely that the person is a functional unity in a functional universe. The presuppositions of one's worldview are rarely included in medical discussion. This article reviews some of the essential elements of the osteopathic approach to the patient, including philosophical issues, and the appearance of vibratory or oscillatory methods used in the application of osteopathic philosophy by key members of the profession.

## Intellectual Roots

Recall that Dr. Still never taught technique. He felt that effective diagnosis and treatment was targeted at the root cause, not symptoms, of a loss of health. He used whatever method worked but his vision was directed toward a fuller, deeper un-

derstanding of the nature of the patient as a person. The novelty of his approach, and our challenge today, is the extent to which decisive information about this state of being can be discerned through manual contact. His primary vehicle for teaching was the anatomy, the tangible evidence of the work of Divine intention. Still's analogies were consistently driven by the idea of reading the orderliness of the Creator and the patterns of body organization for health, thereby, implied. Progressively, he attended to subtle more profound patterns of organization of body function in the development of his thought.

Still's thought developed in a social context. As observed by Still biographer, Carol Trowbridge, much of the underpinning for Andrew Still's philosophy was the thought of Herbert Spencer and the intellectual climate produced in America by his integrated approach to evolutionary biology and cosmology.<sup>22</sup> Spencer held that the unifying principles defining existence involved the compounding of the rules of motion force between all bodies, inert, organic, or social. Each creature existed in a state of interactive balance of physical forces with those around it and

changed due to the absorption or dissipation of motion. All motion was considered rhythmic, due to the shifting of balance in attraction-repulsion as the distance between bodies changed after contact.

*“From the ensemble of the facts as above set forth, it will be seen that rhythm results whenever there is a conflict of forces not in equilibrium. If the antagonist forces at any point are balanced, there is rest, and in the absence of motion there is of course no rhythm. But if, instead of a balance, there is an excess of force in one direction, then for that motion to continue uniformly in that direction, it is requisite that the moving matter should, notwithstanding its unceasing change of place, present unchanging relations to the source of the force by which its motion is produced and opposed. This, however, is impossible. Every further transfer through space must alter the ratio between the force concerned – must increase or decrease the predominance of the one force over the other – must prevent the uniformity of movement. And if the movement cannot be uniform, then, in the absence of acceleration or retardation continued through infinite time and space (results which cannot be conceived), the only alternative is rhythm.”<sup>18</sup>*

Spencer’s 500-page *First Principles* creates a foundation for Still’s description of the interrelationship between structure and function. Rules of motion and physics are noted in observations in the natural world and analogized as consistent rules for form, function of the individual, evolution of species, and patterns for social behavior. His work was expanded in several directions, including the formation of an intellectual movement focused through the “Twilight Club” among whose American members were Oliver Wendell Holmes, Walt Whitman, Mark Twain, Andrew

Carnegie, and John Burroughs. The purpose of the club was to contemplate and discuss solutions for the new century from a downward trend in civilization.

## Progression of Osteopathic Thought

Although Still’s vision was to simultaneously attend to the complementary function of all aspects of the whole person, generationally, there has been a shift of focus from one subset of variables to another. Articular position, restriction of motion, functional dynamics, response to respiration, an array of tender points reflecting symptoms have each taken their turn as the cue for treatment. The greater challenge is to return to attending to these aspects, but as part of an appreciation of a larger pattern of organization of the person, or a universe.

The summary principles from the fifties, now popularly taught in our colleges, articulate the osteopathic interest in the interrelationship of structure and function. Much time is spent in modern osteopathic training in the sciences to elucidate structure (through anatomical studies) and function (through physiological studies), but less time is spent on the focusing on the aspect of the interrelationship. This is reflected in the dynamical, as well as spatial, character of the parts and whole. The concept of vibratory or oscillatory assessment and intervention relates to the dynamical assessment of the living person.

## Sutherland

W.G. Sutherland, DO, an early student of Still’s, is best known for his demonstration and defense of the concept of cranial mobility. His thought went through a lifelong evolution with regard to the root concept of osteopathy, the nature of freedom and restriction of motion. Beginning with the concept of cranial articular mo-

tion, he saw further implications in Still’s attention to the potency of the central nervous system.<sup>19</sup> Still saw the characteristic of the living organism as the infusion of an extraneous ethereal force into matter to form what he called Biogen, consistent with classical theories of animism or vitalism. Sutherland was able to take this vital potency to the level of palpable diagnoses and facilitative treatment using the organizing concept of “the Tide”.<sup>20</sup> Early on he seemed to give this a physical substrate in the form of the CSF, attempting to reconcile Still’s vitalism with conventional physiology. However, as noted by Jealous and others as cited below, this Tide was viewed as more than a hydraulic unfolding of the CNS disseminated through peripheral tissue. It was not delimited by his physical definitions and he still reflected on it as a Life Force.

Sutherland, however, through introduction of attention to the Tide, introduced the dimension of temporospatial organization with periodic character into the arena of freedom / restriction of motion. However defined, periodic fluctuation of the Life Force became the leading principle behind Sutherland’s later work, principally in diagnosis. (We will return to Sutherland’s import and concepts below.)

## Other Still Students

Elmer Barber, DO, who wrote an early text on osteopathic technique in 1898,<sup>1</sup> mentions vibration as a means to break up congestion and inflammation. The application of periodic mobilizing force is more directly expressed in the teachings of another of Still’s early students, J. M. Littlejohn. Although Littlejohn’s focus is articular correction, the maintenance of dysfunctional relationships is markedly dynamical.

*“ In all adjustive movements it is necessary to overcome the passive*

*resistance of inertia in the mechanics of the structures, and the resistance of muscular activities. In the former, the ligaments and cartilages are principally involved, assisted by the weight of the body and, in treatment the freest possible position of the body must be adopted. In the latter, posture may reduce the body to a state of relative inactivity, but it is essential to ask the patient to allow the body to remain passive assisted by distracting the patient's attention from the field of adjustment, by asking the patient to inhale and exhale freely. In the attempt to maintain the passive state the muscles all over the body should be relaxed: in the cervical region a series of gentle movements to the head and neck will generally produce sufficient relaxation to enable a rapid adjustive movement before the muscles have sufficient time to establish tension. In the dorsal and lumbar regions, the best method of relaxing muscles is the arm and leg leverage during which the adjustment is made, or immediately afterwards.*

*The relaxed arm, or leg, represents a neutral state in the mobility of the body, and this is why we practically always use the arm and leg leverage in the correction of the dorsal and lumbar lesions.*"<sup>9</sup>

When one recalls that the emphasis here is on articular correction or adjustment, the coupled oscillatory motion becomes an essential part of normalization of muscle tone. This becomes even more obvious when one watches this in action on video through the teaching of one of Littlejohn's still living students, John Wernham, DO.<sup>23</sup> One can easily describe a definitive role to the oscillatory aspect as well as the intended articular maneuver. Such is the point of Harmonic Therapy described by Laurie Hartman, DO,<sup>7</sup> and Eyal Lederman, DO.<sup>10</sup>

*"Harmonic motion in osteopathic treatment has been in existence from the earliest times. Still had many students, one of these was J.M. Littlejohn, the founder of the Chicago College of Osteopathy and the British School of Osteopathy in London. He taught several of my tutors, Wernham, Hall, Middleton, Webster-Jones, Blagrove, Hardy, Stoddard and many others. They all used some form of harmonic rocking and oscillating in their treatment patterns."*<sup>7</sup>

E. Lederman, DO includes a brief section on oscillatory stretch consistent with the quotation of the intent of Littlejohn above. First, he describes the concept of hysteresis and principles of treatment involving the parameters of loading force and duration in stretch. He then describes cyclic stretching in which the force applied in each cycle is small (compared to an equivalently effective constant stretch), but that there is significant cumulative effect. The first four cycles of a stretching to 10% beyond the muscles resting length are found to produce 80% of the length change expected.<sup>11</sup>

In Littlejohn's view, "relaxing the muscles" is preparatory. Subsequently, Denslow demonstrated a concomitant sympathetically driven hypertonus, which seemed to be part of maintaining the altered motion characteristic of somatic dysfunction or the osteopathic lesion.<sup>2</sup>

## **Developments in Rhythmic Resistive Duction**

The muscle energy model of diagnoses and treatment recognizes muscle hypertonus as a primary causative force in articular restriction of motion. T. J. Ruddy, DO, one of the acknowledged sources of the thought, which later blossomed as Muscle Energy Technique, used oscillatory manipulation as a part of a treatment

sequence. His "Osteopathic Rhythmic Resistive Duction Therapy"<sup>14</sup> was described as a rhythmic muscular contraction by the patient, to restore normal muscle tone. Either hypertonus or atony of musculature is a characteristic of somatic dysfunction. A strategy of repetitive contraction of the musculature attached to a restricted "unit" during the direct treatment procedure was, among other effects, intended to "engender" normal afferent impulses to all nerve centers particularly the pre-motor cortical area for reestablishing normal muscle tone. Quite a bit of attention in this model is paid to restoring normal neurological balance, limited by the conceptualization of the neuromuscular system at the time. However, the role of rhythmic activity is again introduced as an aspect of treatment.

Fred Mitchell, Jr., DO, converts this technique to an active oscillatory motion against constant patient contractive force to treat scalene tightness under the heading of Vibratory Isolytic Technique as a strategy of overcoming the myotactic reflex associated with somatic dysfunction by "possibly overwhelming the proprioceptive mechanism."<sup>13</sup>

## **Sutherland and Russell**

Robert Fulford was a recent osteopathic graduate when he accompanied Dr. Sutherland to collaborate with Walter Russell, a practical philosopher who saw the world in terms compatible with Sutherland's principles of palpating the Life Force as a way of working in complementary fashion with the Creator. Walter Russell, after Spencer, was the coordinator of the Twilight Club mentioned above. His cosmology began by saying that "The universe in its entirety is One thinking, living, breathing, pulsing universal being."<sup>15</sup> Being, motion and thought were intertwined concepts and interactive forces. Russell held this philosophi-

cally, Sutherland saw it clinically. This reinforced Sutherland in the significance of the motion he had palpated, as an extension of an endowed vital process, associated with breathing. It underscored the integration of this respiration with participation in a larger dimension of life. Respiration became the Breath of Life, concomitant with Russell's description of the Life Force. Russell's cosmology also included the Pythagorean concepts of harmonic influences in creation. He extrapolates this to describe all interactions as having a common balanced electro-magnetic aspect. This both recognized the importance of rhythmic motion to all levels of life and could provide a basis for physiologic induction of indigenous cyclic motion through intention, as is brought forth more clearly in the thought of Sutherland's student, Rollin E. Becker, DO.

Some other concepts of Russell's, which later had influence on Fulford's thoughts included the idea that "Mind is the concept force of this created universe of form. Form in matter is the reflected expression of the concept force." Or, "Matter is the substance of mind". Another was the concept of "Balanced Rhythmic Interchange": Russell uses it in his cosmogony to describe interaction at all levels, while Fulford was later to apply it in clinical practice to coordinate the interaction of trauma, dysfunction and treatment in the patient.

While Sutherland included a place for intention, spiritual dimension and oscillatory diagnosis, he applied the concept of therapeutic vibration in a confined field. In *Teachings in the Science of Osteopathy*,<sup>21</sup> there is a sequence of lymphatic mobilization.

*"The physiologic emptying requires a gentle and rather unique siphoning process in the thoracic duct. This process can be assisted or facilitated by the use of feeling, seeing, thinking, and knowing fingers. This*

*guidance varies from manual manipulation. During the application, fingers of one hand establish a contact over lymph nodes while a transmitted vibration is initiated through the other hand, which is placed on top of it. A quiet pause-rest should occur between applications. The first application is to the upper left thorax near the axilla. The second is done with a lift to the area above the receptaculum chyli. The third is at the great omentum, with a lift. The transmitted vibration initiates the siphoning process."*

Despite Sutherland's reference to the application of vibratory motion to enhance a physiologic process, most of Sutherland's students did not integrate this concept into their expression of cranial osteopathy. Most defined the cranial concept in articular terms, as was the pattern of Sutherland up until this point. They did not see it as an impetus toward an expanded concept. However, Fulford began a semi-independent train of thought, integrating oscillatory or vibratory motion into the articular concept.

## **Robert Fulford's Integration of Vibratory Motion**

Fulford, even as a young person, had been looking for unifying concepts that would coordinate the various treatment approaches he had been taught. He intuited a connection between Russell's and Sutherland's periodic rhythms and wanted ways of amplifying the concept to assist patients. He followed these themes of vibratory motion through a series of trials. His 1940s black bag included homeopathic remedies. He pursued a course of study with Randolph Stone, DO, who had traveled the Orient studying Ayurvedic and other healing systems and translated the concepts into Polarity Therapy. Basically this

marks an attempt to balance the electromagnetics of patient and operator to enhance the energetic nature of the patient using the eastern model of meridians to describe the nature of man. Stone recognized Fulford as an astute and insightful student.<sup>16</sup> Fulford identified Stone's power not so much in his conceptualization of the nature of the body but "It was his VOICE." Apparently Stone had a deep resonance which was commanding.

In any case, in 1955 by apparent chance, Fulford received a mailing advertising the Freedom Percussion Vibrator as a physical therapy adjunctive device. Fulford saw, "This was exactly what I was looking for."<sup>16</sup> Beginning intuitively, he felt this to be an effective means of transmitting his therapeutic intention. According to his mentors cited above, musculoskeletal restriction of motion existed first in the energetic or "eathric" body of the patient. The percussion perpendicular to the surface of the skin maximized the potential for the skin to act as a transducer of energy from the physician to patient. The physician's intention was amplified by the percussive vibration. As in any treatment, the monitoring hand at a strategic location assessed and modulated the placement and speed of the vibration, and assessed the appropriate end point of treatment. Progressively through empiric trials he found associations between symptoms, personal history of trauma, and palpable subtle changes in the person that he reconceptualized as changes in the eathric or energetic body. These could be palpated on or off the body. Clearly there were correlative findings in terms of tissue texture change and alteration of motion characteristics. However, Fulford's main criterion for determining success was his assessment of the state of the body in the "eathric" field. His expression of this was as "The Breath of Life" which was compatible with Sutherland's expression of the Tide, or Life force.

Building on the ideas of Russell, Fulford reflected further on the writings of the neurophysiologist H.S. Burr, whose writing describing a measurable L- field (life field).<sup>3</sup>

Fulford, from another source, described the physical breath and coexpressive with this breath of life. Consistent with eastern conceptualizations of pranic breathing, Fulford made a connection between diaphragmatic breathing and an energy exchange beyond what we commonly express as oxidation-reduction through alveolar exchange. His palpation of respiration evolved as a hybrid between the primary respiration of Sutherland and the polarity issues involved with Randolph Stone's thought. In any case, breathing had an energetic character, which was part of assessing the well being of the patient, and was impacted by trauma and amenable to manipulative release. It had more significance than simple mechanical motion.

Although sometimes construed to the contrary, Fulford's main interest was not with vibration per se but with enhancing freedom of function on all levels, using the energy state of the body as the vehicle for diagnosis and treatment. He used subtle touch, magnets, quartz crystals and other means, correlated with intention, to intervene for healing. On several occasions late in life, Fulford read at meetings the following position statement:

*"The human body is composed of complex interflowing streams of moving energy. When these energy streams become blocked or constricted we loose the physical, emotional, and mental fluidity potentially available to us. If the blockage lasts long enough, the result is pain, discomfort, illness and distress."<sup>5</sup>*

When in a discussion regarding a treatment using a Vogel cut crystal as an amplification device for vibratory treatment, Fulford was asked how this

related to the study of osteopathy. His reply was "how can you be successful without the knowledge of osteopathy for diagnosis."<sup>6</sup>

The key to Fulford's methods was a view of the person as a dynamic system in which restriction of this dynamic process was responsible for loss of health, motion and comfort. Restriction was not limited to material mechanics. In his thoughts we see the root ideas of Still, Sutherland, Spencer, Russell, and Stone as noted above.

## The Next Generation

The current generation of students of Sutherland, Littlejohn, and Fulford have the challenge of sorting this out and deciding how to take it further into a synthetic model of osteopathic approach to the patient, the expanded osteopathic concept.

Carlisle Holland, DO, who has done considerable work in applying cranial osteopathy to children, has utilized the percussion vibrator, the "hammer" as Fulford sometimes called the vibrator, as a device to create an opportunity for connective tissue release. As an extension of cranial and connective tissue conceptualizations of the body, he uses one or more machines in resonant or dissonant fashion. The vibratory force is envisioned as remobilizing adherent fascial planes after traumatic restriction. Emphasis is placed on the energetic nature of the body in maintaining its form, including connective tissue arrangements.

Richard Koss, DO and Rajiv Yadava, DO, at the request of Dr. Fulford, continue to teach the course in which they assisted him during the last years of his life. Their primary intention is to preserve his thought.

John McPartland, DO and Eric Mein, MD have applied the principles of entrainment of harmonic oscillators as a means of influencing the cranial rhythmic impulse of patients

treated in Sutherland's cranial model. They review the hypotheses put forth to explain the intrinsic motility of the brain, make note of other biologic oscillatory functions and phenomena in the body, and hypothesize that "the CRI is the perceptible entrainment, a palpable harmonic frequency of multiple biologic oscillators." "Our entrainment hypothesis may also explain how CST (craniosacral treatment) practitioners bring about therapeutic changes in the patients." Here they develop the theme of coupled oscillation as a phenomenon in nature and its applicability to operator-patient interaction.<sup>12</sup>

James Jealous, DO, elaborates a history of Sutherland's appreciation and description of the oscillatory aspect of biologic process in a person. He uses, as Fulford did, the interrelated concepts of the Tide, the Breath of Life, as avenues for diagnosis and treatment. Again, the means of engagement is synchrony with endogenous rhythmic motion. As with Sutherland, the means of intervention is manual, but augmented by a shift of attention and loving intention as with Fulford. The perceptible movement is considered significant beyond the mechanical and includes dimensions which are vitally transcendental, spiritual, and in any case more sublime than the physical, biomechanical only. However, through transmutation of forces, manual contact in the context of loving intention can induce clinical improvement. Clinical effectiveness is increased by attending to the "Long Tide", an oscillatory dynamic with characteristic base rate of one cycle each 2 to 3 minutes. As noted above, this approach integrated the osteopathic emphasis of treating according to one's progressively refined appreciation of the nature of the person, beginning with embryogenesis.<sup>8</sup>

The author teaches a course in Fulford's synthetic methods. Addi-

→

tionally he has derived a manual application of oscillatory manipulation as an extension of Fulford's synthesis called Facilitated Oscillatory Release.<sup>4</sup> Clearly there are commonalities with other approaches, especially Wernham's application of the teachings of J.M. Littlejohn. However, there are unique considerations evolving from the desire to apply Fulford's amplification methods and philosophy of the nature of the patient without the availability of a percussion vibrator, crystal, or other device. The approach includes considerations of trauma on multiple planes of body organization. To further elucidate the structural-functional interrelatedness of the person, additionally, the author is involved in biophysiological research to demonstrate the compatibility of the energetic or vibratory approach to somatic dysfunction and newer conceptualization in the field of neurobiology of oscillatory function. These include central pattern generation, and resonant cell assembly models for explaining the binding and coding of perceptual experience. Application to the peripheral nervous system may clarify the nature of postural as well as proprioceptive patterns of muscular coordination and dysfunction. Certain investigators implicate temporo-spatial coding as the means of internal communication of the neuromuscular system as a complement to the classical view of the order through a network of pathways and ganglia, and nuclei. Practical applications of these oscillatory events may further define the nature of the person as a way of understanding dysfunction in the style of investigation of Still and others as elaborated above.

## Summary

Robert Fulford, DO, challenged osteopathic physicians to expand on the mechanical interpretation of biophysics and include other knowledge

about the nature of the patient in diagnosing and treating. Led by intuition and a desire to serve, his clinical effectiveness preceded his ability to explain. This paper is an effort to place Fulford's concepts in the context of the classical struggle of osteopathy to treat the dysfunctional component as an aspect of the whole person. But, our view of the whole person is framed by our perception of the nature and laws of function of the universe. This dimension is not routinely taught in medical school but is clearly an aspect of Still's thoughts and is implicated in the work of many of his subsequent serious students.

*"The Osteopath finds here the field in which he can dwell forever. His duties as a philosopher admonish him, that life and matter can be united, and that union cannot continue with any hindrance to free and absolute motion".<sup>19</sup>*

The process of elucidating this quest did not begin or end with Still. From his predecessors as represented in Spencer (rhythm is a necessary characteristic of all motion)<sup>17</sup> and his students through several generations, as illustrated above, including Robert Fulford, observation, diagnosis, and treatment may include this rhythmic aspect of motion. Methodological decisions of emphasis and abstraction of various aspects of human nature have included vibratory or oscillatory approaches. Percussion Vibratory treatment, and other Fulford methods of applying energetic treatment, is embedded in the context of osteopathic tradition and thought and its current expression.

## References

1. Barber, ED, *Osteopathy Complete*, 1898, reprinted by Lifeline Press, Virginia Beach, Virginia.
2. Beal, M, Ed., *Selected Papers of John Steadman Denslow, DO*, 1993 yearbook, American Academy of Osteopathy, 1993,

- pp. 19-23
3. Burr, HS, *Blueprint for Immortality, the electric patterns of life*, Saxton Walden, Essex England 1972.
4. Comeaux, Zachary, *Facilitated Oscillatory Release*, 1998, unpublished paper in review.
5. Fulford, R, "Vibrating Energy", AAO Convocation presentation, 1992, personally transcribed notes.
6. Fulford, R, Cranial Academy Convocation Presentation, Chicago, 1997, personally transcribed notes.
7. Hartman, L, personal communication via e-mail in response to inquiry to web site, 1998.
8. Jealous, J, *Emergence of originality: a biodynamic view of Osteopathy in the Cranial Field*, course workbook available from author, Franconia, New Hampshire.
9. Littlejohn, JM, *The Fundamentals of Osteopathic Technique*, reprinted by John Wernham College of Classical Osteopathy, Maidstone, Kent, England pp. 98-99.
10. Lederman, E, *Harmonic Technique*, Churchill Livingstone, Edinburgh, 1999.
11. Lederman, E, *Fundamentals of Manual Therapy*, Churchill Livingstone, Edinburgh, 1997, p. 32.
12. McPartland, J, and Mein, E, "Entrainment and the Cranial Rhythmic Impulse", *Alternative Therapies*, Jan 97, vol. 3, no. 1, pp. 40-45.
13. Mitchell, F, *The Muscle Energy Manual*, Vol. 2, MET Press, 1998, p. 94.
14. Ruddy, TJ, "Osteopathic Rhythmic Resistive Duction Therapy", *Academy of Applied Osteopathy*, 1961 Yearbook, pp. 58-68.
15. Russell, W, *The Universal One*, University of Science and Philosophy, Schwannanoah, VA, 1926.
16. Stone, Randolph, unpublished letters to R. Fulford, 1955.
17. Spencer, H, *First Principles*, A.L. Burt Publishers, New York, 1880, pp. 220, 221.
18. Still, AT, *The Philosophy and Mechanical Principles of Osteopathy*, Hudson and Kimberly Pub., Kansas City Mo., 1902, pp. 44-46.
19. Still, AT, *Philosophy of Osteopathy*, Kirksville, MO, 1899, p. 197.
20. Sutherland, WG, *Contributions of Thought*, The Sutherland Cranial Teaching Foundation, 1967 pp. 142-143.
21. Sutherland, WG, *Teachings in the Science of Osteopathy*, The Sutherland Cranial Teaching Foundation, 1990 pp. 136-138.
22. Trowbridge, C, *Andrew Taylor Still 1828-1917*, The Thomas Jefferson University Press, Kirksville, MO, 1991, p. 164.
23. Wernham, J, *Applied Osteopathic Therapeutics*, Institute of Classical Osteopathy, Maidstone, Kent, England 1996. □



# Carpal tunnel syndrome: more than just a problem at the wrist

by Kenneth A. Ramey, DO, Assistant Professor, Department of OMM, Western University/Chicago College of Osteopathic Medicine, Chicago, IL

Carpal tunnel syndrome is classically described as a symptom complex resulting from compression of the median nerve underneath the transverse carpal ligament at the wrist. It can result in significant patient discomfort and economic loss. In many cases, the condition does not adequately respond to the standard of care including rest, NSAIDs, wrist splints, steroid injections, physical therapy and surgery. Fortunately, this condition frequently responds favorably to OMT.

## Symptoms

Patients typically present with pain involving the wrist and/or pain, numbness or tingling affecting the thumb, index, middle and radial side of the ring finger. These may wake the patient up at night. Pain may also be referred to the elbow and shoulder.

## Diagnosis

Provocative tests can aid in the diagnosis of carpal tunnel syndrome. These include Phalen's maneuver, Tinel's test and the median nerve compression test. Thenar atrophy may be observed. EMGs remain the gold standard for the diagnosis of this condition.

## Anatomy

The median nerve arises from the brachial plexus. The brachial plexus arises from spinal nerves C5-T1. The brachial plexus courses between the anterior and middle scalene muscles, between the first rib and clavicle and underneath the pectoralis minor muscle. The median nerve passes deep to the bicipital aponeurosis (fibrous band connecting the biceps tendon to the forearm fascia). It then passes between the two heads of the pronator teres muscle and through the fibrous arch formed by the flexor digitorum superficialis muscle. It then courses underneath the transverse carpal ligament at the wrist.

## Research

Most treatments seem to focus on increasing the space underneath the transverse carpal ligament for the median nerve. One important question is not frequently addressed. Why isn't there enough room underneath the transverse carpal ligament?

Drs. Kappler, Chimata, Hohner, Mizera and myself have completed a research study addressing this issue. MRI images were used to assess changes in fluid content (swelling) in both the carpal tunnel and median nerve after OMT treatment. These

measurements were correlated with changes in nerve conduction velocities, pain ratings, wrist motion measurements and somatic dysfunction measurements.

Six patients were diagnosed with carpal tunnel syndrome. OMT treatments were focused on the upper thoracic spine, lower cervical spine and tenderpoints in the forearm muscles. OMT was not applied to the wrist in an attempt to stretch the transverse carpal ligament. Five patients responded with improvement in symptoms and one did not. The responder group demonstrated decreased swelling in both the median nerve and carpal tunnel. The nonresponder demonstrated increased swelling in both the median nerve and carpal tunnel. Changes in the swelling of both the median nerve and carpal tunnel appeared to more closely parallel changes in hand symptoms than the nerve conduction studies. Statistically significant changes did not occur in the length of the transverse carpal ligament or the area of the carpal tunnel.

All six patients had a predominance of acute changes in the upper thoracic spine and upper ribs. Most patients had increased tension in the flexor muscles of the forearm.

→

## Treatment

What is the role of the sympathetic nervous system in the development of carpal tunnel syndrome? In our study, all six patients had a predominance of acute changes in the upper thoracic spine and upper ribs. Cell bodies of preganglionic neurons concerned with the upper extremity are located in the upper thoracic spinal segments. The smooth musculature in the walls of lymphatic vessels contract when sympathetic nerves are stimulated. This reduces the size of the lumen, thereby impairing lymphatic drainage. Increased sympathetic tone can therefore close down lymphatic channels and lead to congestion in regions of the body. Upper thoracic dysfunction increases sympathetic tone to the upper extremity and decreases lymphatic drainage. This may lead to the increased swelling observed within the carpal tunnel (and possibly the entire upper extremity) and the subsequent production of symptoms. This is why treating upper thoracic and upper rib dysfunction is of utmost importance in effectively treating this condition. The upper thoracic spine may be treated using any technique comfortable for you. The upper thoracic spine and upper ribs may respond best to counterstrain and indirect techniques when acute tissue texture changes are present.

What is the role of the “double crush” in the genesis of carpal tunnel syndrome? The double crush hypothesis proposed by Upton and McComas explains that compression of axons at one location may not impair axoplasmic transport enough to result in denervation changes in their target structures. If a similar amount of compression is simultaneously applied at a second location, the threshold for denervation effects is exceeded and symptoms occur. Basically, if the nerve becomes compressed proximally, it is more predisposed to injury distally. Remember, the median nerve

arises from the brachial plexus. You need to appropriately address somatic dysfunction contributing to compression along the entire course of the brachial plexus and median nerve.

1. C5-T1 – origin of the brachial plexus. This area may be treated using any method comfortable to you. It may respond best to indirect or counterstrain techniques if acute tissue texture changes are present.
2. Anterior and middle scalene muscles – the anterior scalene muscle originates from C3-C6 and inserts on the first rib. The middle scalene muscle originates C2-C7 and inserts on the first rib. Both function to sidebend the neck toward the same side. Treat somatic dysfunction affecting the origin and insertion of these two muscles (C2-C7 and first rib).

Muscle energy technique – Example right anterior and middle scalene tight. Patient seated. Physician stabilizes the right shoulder with his/her right hand. The left hand is used to control the top of the patient’s head and to sidebend the cervical spine to the left. Engage the barrier. Maintain this position while instructing the patient to gently (3-5 pounds of force) bend the neck to the right. The patient maintains the contraction for 3 seconds. Instruct the patient to relax. Wait 2 seconds and engage the new barrier. Repeat a total of 3-5 times. Reevaluate the scalenes. Has the motion improved?

3. Elevated first rib – typically, if the first rib is elevated on the right, T1 is rotated left and sidebent left. The vertebrae may need to be treated before the rib will respond. Or, problems in the upper thoracic spine on the left (T1-T4) may give the appearance of a “falsely elevated” first rib. Treating the upper thoracic dysfunction may normalize the motion of the first rib without having to directly treat the

rib. This area may be treated with HVLA, muscle energy or any other technique you prefer.

4. Pectoralis minor muscle and biceps muscle – the patient is seated. The physician palpates for tenderness and tissue texture changes over the coracoid process (insertion of the pectoralis minor muscle). Palpation is also done to determine the presence of tension in the biceps tendon.

Example – right pectoralis minor and biceps tight. The patient is seated. The physician drapes the left hand over the patient’s right shoulder so that the monitoring finger rests over coracoid process. The physician uses the right hand to hold the patient’s right forearm. The patient’s right arm is flexed to load the triceps muscle and unload biceps muscle. Force is applied through the left hand and body to protract the shoulder thus unloading the pectoralis minor muscle. Listen with your fingers. The tension in the pectoralis minor muscle will decrease. This method can be used as a counterstrain method and held for 90 seconds. Alternatively, an indirect release can result from holding the position until the release is completed and the tissues cease to soften. Reevaluate the area. Has the motion improved?

5. Pronator teres muscle and forearm flexors – assess pronation and supination in the involved forearm. Frequently, supination is restricted. Palpate for tenderness and tissue texture changes over the volar surface of the forearm. The muscles may feel tight. One finger serves as a monitor. Pronate (turn palm toward floor to unload pronator teres) and flex the patient’s forearm (load extensors and unload flexors) until tension of the pronator and/or flexor muscles is decreased. Either hold for 90 seconds (counterstrain) or until the tissues finish softening (indirect release).

Reevaluate the area. Has the motion improved?

6. Transverse carpal ligament – as a general rule, this ligament only needs to be stretched if the wrist is thickened (osteoarthritis). The transverse carpal ligament attaches medially to the pisiform and hook of the hamate. It attaches laterally to the trapezium and scaphoid. Carpal tunnel surgery involves transecting this ligament to increase space within the carpal tunnel.

Example – right wrist. Forearm pronated (palm toward floor). The physician's left index finger contacts volar side of the patient's wrist, just medial to pisiform and hamate. The left thumb is positioned over the dorsal side of the patient's wrist. The remaining fingers of the left hand are spread over the hypothenar eminence. The physician's right index finger contacts volar side of the patient's wrist, just medial to scaphoid and trapezium. The right thumb is placed over the dorsal side of the patient's wrist. The remaining fingers of the right hand are spread over thenar eminence. Using the thumbs as a fulcrum, separate (bowstring) the two ends of the transverse carpal ligament. Hold until a release occurs.

## Additional Management

Poor posture can contribute to somatic dysfunction in the upper thoracic spine. Many people work at a desk or computer and subsequently develop a kyphotic posture wherein the scapulae are protracted and the shoulders are rolled forward. The pectoralis minor muscle becomes tightens. Workstation problems need to be addressed. The computer screen may need to be raised to eye level to promote good posture. The chair height may need to be altered to promote good wrist mechanics (keep wrists straight while typing). Grips on tools may need to be altered to reduce stress on wrists and forearms. The patient

may need duty modification or job rotation to reduce repetitive microtrauma (typing long hours without a break). The patient may benefit from performing daily postural exercises, scapular stabilization exercises and stretches for the pectoralis minor and scalene muscles.

1. Pectoralis minor stretches – example right pectoralis minor tight. The patient stands facing wall and places both hands at shoulder height. The back is kept straight and the shoulders are depressed. The patient turns the body to the left until a stretch is felt in the pectoral area. Leaning the body toward wall may enhance the stretch. Hold for 30 seconds and release. Perform 2-4 repetitions on each side. Stretch to symmetry on both sides<sup>1</sup>.

2. Reverse angry cat exercise – this exercise is very effective for stretching (mobilizing) the upper thoracic spine and stretching the entire upper extremity. The patient is kneeling, palms down with thumbs turned outward. The patient inhales while pressing the upper thoracic spine up toward ceiling, tucks the chin to the chest and tucks the seat in (rounds the spine). This position is held for 2 seconds. Pause briefly. The patient exhales while lifting the head up toward the ceiling and allows the seat to fall posteriorly (flattens spine). Pause briefly. Repeat the exercise 5-10 times daily. The patient may feel a tremendous stretch in upper extremity. Avoid producing pain. Progress slowly and carefully.

3. Core training - weak abdominal muscles can contribute to increased lumbar lordosis and a compensatory increase in thoracic kyphosis. The patient may benefit from gentle strengthening exercises for both the abdomen and low back.

4. Scalene stretches – example right scalenes tight. The patient is seated in a chair. The patient's right arm is straight and holds on to the bottom of the chair. The patient reaches up with the left arm, contacts the head and sidebends the neck to left until a stretch is felt. The right arm holds onto the chair and prevents the right shoulder from elevating. Hold for 30 seconds. Perform 2-4 repetitions on each side. Stretch both sides to equal symmetry.

Carpal tunnel stretches may help if there is decreased space within the carpal tunnel due to osteoarthritis. Thickening of the wrists may be seen and palpated on clinical exam. The patient stands facing toward wall. The palm is placed flat against wall. The wrist is gently extended. The other hand is used to gently extend the thumb. Hold for thirty seconds. Repeat 1-4 times daily as tolerated<sup>2</sup>.

Other pearls – avoid producing pain. Pain produces spasm, inflammation and further swelling. Be patient. You can only progress as rapidly as the patient's body can respond. Nerves regrow at a rate of approximately 1 inch per month (1 mm per day). If the nerve is injured more proximally, it may take some time for complete regrowth and healing to occur.

Failure to respond to conservative measures and/or progressive neurologic symptoms (significant and/or progressive thenar atrophy) are an indication for surgery.

## References

1. Greenman, Philip E.; Principles of Manual Medicine. 2<sup>nd</sup> Edition. Baltimore: Williams and Wilkins;1996:499.
2. Sucher, BM; Myofascial Manipulative Release of Carpal Tunnel Syndrome: Documentation with Magnetic Resonance Imaging. *JAOA*. 1993;12:1273-8.□

# Seated Flexion Test

## A study questioning the need for the patient's feet on the floor

by Robert E. Kappler, DO, FAAO, Chicago, IL

### Description of standing and seated flexion tests

The standing and seated flexion tests were introduced to the osteopathic profession when Fred Mitchell, Sr., DO, presented his paper "Structural Pelvic Function" in 1958, and introduced the Muscle Energy model of sacral/pelvic function<sup>1</sup>. These tests are performed by having the examiner grasp the pelvis, with firm contact of the thumbs against the posterior superior iliac spine. The patient is instructed to bend forward. The thumbs move superiorly as the patient bends forward. If one thumb moves further than the other thumb, the test is positive. Motion restriction is indicated on the side that the thumb moves further. The standing flexion test is done with the patient standing, and incorporates the influence of the lower extremities. A positive standing flexion test indicates ilio-sacral dysfunction. The seated test removes the influence of the lower extremity. A positive seated flexion test indicates sacro-iliac dysfunction. Traditionally this test has been taught with emphasis on having the patient's feet on the floor.

The reason for having the patient's feet contacting the floor is obscure. One year ago, I asked the question at an E.C.O.P. (Educational Council on Osteopathic Principles) meeting: "What is the purpose of having the patient's feet on the floor?" The response was: "To keep the patient from falling forward." In my clinical prac-

tice, if the patient is seated on the OMT table, I find it most inconvenient to have the patient move to a treatment stool so that their feet will be on the floor, and then do the test. I do the test with the patient's feet dangling. This seems to work well. To evaluate the question of feet placement, this test was done both ways.

### Methods

Subjects (n = 100) were recruited from the MS-I and MS-2 OMM skills laboratory sessions. Subjects included students, assistants, and faculty. Criteria for inclusion was any adult volunteer who was capable of bending from the hips when in a seated position. Criteria for exclusion was any subject who was unable to comfortably or safely bend forward from the hips when in a seated position. Data was collected during laboratory sessions on December 8, 1999. The procedure took less than one

minute per subject, and was recorded by an assistant. The protocol was submitted to the Midwestern University IRB, and was approved as an exempt study.

*Abstract: The seated flexion test was performed on 100 subjects, first with the subject seated and feet dangling. The test was then repeated with the patient's feet on the floor. Ninety-seven subjects showed no change. Three subjects with an initial positive test changed; two became negative, one became positive on the opposite side. There were no false negative tests.*

Dr. Kappler performed a seated flexion test with the subject seated on an osteopathic treatment table. (In this position, the feet do not touch the floor). The subject was then instructed to sit on a treatment stool (with the feet touching the floor) and the seated flexion test was repeated.

### DATA (n = 100)

TABLE (feet dangling)	STOOL (feet on floor)	NUMBER	RESULTS
NEG	NEG	26	NO CHANGE
+ LEFT	+ LEFT	11	NO CHANGE
+ RIGHT	+ RIGHT	60	NO CHANGE
+ RIGHT	NEG	2	CHANGE
+ RIGHT	+ LEFT	1	CHANGE

*This study showed that 97 out of 100 subjects had the same result of the seated flexion test, comparing feet off the floor with feet on the floor.*

1. Mitchell, FC Structural Pelvic Function, 1958 A.A.O. Yearbook, p. 71

# Standing flexion test study

*Abstract: Thirty subjects with unlevel iliac crests and a positive standing flexion test were studied. The test was done, then repeated with shims added to level the iliac crests. Twenty-eight subjects showed no change. In two subjects, the test became positive on the opposite side. In all subjects, the initial positive test was on the long leg (high iliac crest) side.*

## Introduction

Some members of the osteopathic profession believe that prior to performing the standing flexion test,<sup>1</sup> the iliac crests must be leveled. This is accomplished by placing shims under the patient's foot on the side of the low iliac crest. To test whether leveling of the iliac crests is a necessary prerequisite to performance of the standing flexion test, we conducted the following experiment. The standing flexion test was performed. The iliac crests were then leveled, and the standing flexion test was repeated.

## Protocol

Volunteers (n = 30) were recruited from the CCOM MS-I and MS-II classes. Criteria for inclusion included unlevel iliac crests and a positive standing flexion test. Criteria for exclusion included an unwillingness to participate in the study, or inability to safely bend forward from a standing position. The study was approved by the Midwestern University Institutional Review Board as an exempt study.

The examining physician performed a standing flexion test and recorded the results. Next, shims were placed under the short leg (low iliac crest side) to level the iliac crests. The standing flexion test was then repeated and the results recorded.

## Results

Sixteen subjects had an iliac crest low on the right. Fourteen subjects had an iliac crest low on the left. In all thirty subjects, the standing flexion test (before shimming) was posi-

tive on the side of the high iliac crest, or long leg side.

Twenty-eight of thirty subjects showed no change in the side of the positive standing flexion test after the iliac crests were leveled. Two subjects showed a change in the side of the positive test after shimming. One subject had a low iliac crest on the right; the other had a low iliac crest on the left. Additional testing revealed that both subjects had significant sacroiliac restriction.

Whether the test for significance was chi-square or the Fisher exact test, the differences between the two groups (29 with no change, 2 with change of side) was significant ( $P < 0.000$ ). The statistical power for this number of cases with the indicated outcome was 96 percent.

## Statistical Assessment

Cross-tabulations were performed using the Fisher exact test as well as the chi-square test for significance. Power and sample size calculations were performed using the method of DuPont and Plummer<sup>2</sup>

## Discussion

The purpose of the standing flexion test is to determine the side of iliosacral dysfunction. This study shows that the standing flexion test is a reliable test to identify the side of the high iliac crest in those subjects who have unlevel iliac crests. This is not the stated purpose of the test. There is no explanation as to why the test was positive 100 percent of the time on the high crest side. There was no apparent relationship between the

thickness of shims used and the occurrence of positive findings.

There is no apparent reason why leveling the iliac crests is necessary prior to performing the standing flexion test, except that some physicians hold a strong opinion that leveling is necessary. There can be false positive and false negative standing flexion tests<sup>3</sup>. One of the causes of a false positive standing flexion test is carryover from sacroiliac dysfunction. Additional testing is necessary to evaluate sacroiliac problems.

My personal approach to a positive standing flexion test suggests that something is wrong. Interventions (treatment) which convert a positive test to a negative test should improve function. Additional testing is necessary for an adequate evaluation of the patient's problem.

Leveling the iliac crests changed the side of the positive standing flexion test in two subjects. Further examination of these subjects determined that both subjects had significant sacroiliac restriction. Note: A number of motion tests other than the seated flexion test was used to confirm sacroiliac restriction. Regardless of the method of sacroiliac evaluation, the confusion regarding the side of the positive standing flexion test (positive on one side before shimming, positive on the other side after shimming) is not relevant to the treatment of the sacroiliac dysfunction. Certainly, the side of the positive standing flexion test would not contribute to the diagnosis of the sacroiliac dysfunction.

→

Considering the strong opinion of those physicians who insist that the iliac crests must be leveled prior to performing the standing flexion test, it was somewhat disappointing that there were not more subjects in which the side of the positive standing flexion test changed after shimming, either to the other side or to become negative. In this study, there were no cases where shimming caused the positive standing flexion test to become negative.

In conclusion, it is not necessary to level the iliac crests before performing the standing flexion test.

## References

1. Johnson, K., "A Functional Approach to Heel Lift Therapy", AAO Journal, Spring, 1996, p. 2
2. Dupont, WD, Plummer Jr., WD, Power and Sample Size Calculations. A Review and Computer Program. Controlled Clinical Trials, 1990; 11:116-128.
3. Ward, RC (editor), Foundations for Osteopathic Medicine, Chapter 49 "Pelvis and Sacrum", p. 612. Williams & Wilkins, Baltimore 1997□

## 2001 CME Manual of the American Academy of Osteopathy is in its final stages before printing. Watch your Mail for dates and locations of "hands-on" OMT Workshops.



For more information, please contact:  
American Academy of Osteopathy  
3500 DePauw Blvd., Suite 1080  
Indianapolis, IN 46268  
Phone: (317) 879-1881

### Workshops scheduled are:

Introduction to OMT/Counterstrain  
Myofascial Release: A new osteopathic model  
Ligamentous Articular Strain  
Visceral Manipulation: Emotional Release  
2000 Convocation: Restoring Life and Function  
to the Chronic Pain Patient  
Stimulated Ligament Reconstruction/  
Above the Diaphragm (Prolotherapy)  
New Advances in HVLA  
Fulford's Percussion Technique; Basic Course  
Introduction to OMT/Muscle Energy  
Osteo. Considerations in Systemic Dysfunction  
Alleviation of Common, Chronic Pain  
by Optimization of Normal Posture  
Eleventh Annual OMT Update  
The Still Technique: A Manipulative Method of  
Andrew Taylor Still, MD  
Introduction to OMT – HVLA  
Stimulated Ligament Reconstruction/  
Below the Diaphragm (Prolotherapy)  
AOA/AAO Convention  
Visceral Manipulation: Abdominal/GI

Assistant/Associate Dean  
Opportunity - KCOM  
1/2 page b/w

# An Ancient Persian High-Velocity, Low-Amplitude Thrusting Technique for Somatic Dysfunctions of the Thoracic Spine

by Mohammad Namazian, OMS IV, BS, EMT-P; TOURO University College of Osteopathic Medicine (TUCOM), Class of 2001; Co-authors: Robert C. Clark, DO, MS, Chairperson of Department of Manipulative Medicine, TUCOM; James Binkerd, DO, Assistant Professor, Department of Manipulative Medicine, TUCOM

## Abstract

*The history of manipulative techniques of the spine dates back to as early as 400 BC. The tradition of these early bone setters is still alive and practiced in Persia by healers known as Shekastehband. The purpose of this paper is to describe to the western manipulator a standing high-velocity low-amplitude technique for the treatment of the thoracic spine as employed by today's Persian bonesetters. This technique provides the osteopathic physician with a modus of thoracic spinal adjustment that exerts minimal compressive force onto the thorax.*

## Introduction:

Manipulative techniques of the spine have been practiced since the dawn of medicine, dating back to as early as Hippocrates and the physicians of ancient Rome. These early manipulators were known as bone setters and their art was often passed on from one generation to another.<sup>1</sup> This tradition has maintained itself in the Persian culture where the art of bone setting still exists and is commonly known as Shekastehbandy (Farsi, noun: cohering the broken). The objective of this paper is to introduce to western manipulators one of the commonly used methods of manipulation of the thoracic spine employed by Persian Shekasteh-bands. This standing technique offers the osteopathic physician one more variation to the existing osteopathic standing techniques for the manipulation of the spine and further enhances the physician's abil-

ity to customize therapy according to patient needs and limitations.

### *Survey of Commonly Used Methods:*

Manipulation of the thoracic spine is concerned with the correction of a dysfunction of one or more vertebral segments. This dysfunction is associated with segmental hypomobility and is usually diagnosed through palpation.<sup>2</sup> The traditional Persian healer employs palpation, passive range of motion and active range of motion as his core diagnostic tools, greatly resembling osteopathic diagnostic modalities. The following is a list of the commonly taught manipulative HVLA techniques of the thoracic spine. Each of the various techniques outlined can be used to address one or several restrictions along the cardinal planes of a single or several vertebrae. The references indicated for each technique

provide a more complete description.

### *1) Patient supine with arms crossed*

The patient is supine and the physician is standing at the side of the table opposite the side of the vertebral dysfunction. The patient is instructed to fold the arms such as when hugging oneself. The physician then creates a fulcrum with his/her caudal hand, placing it underneath the thoracic vertebra of the patient and on top of the treatment table. The practitioner then leans over the patient's torso, thus placing the patient's elbows underneath the physician's ribcage. The corrective force is exerted by the practitioner's torso and transmitted through the patient's arms onto his ribcage and into his thoracic spine, compressing it against the physician's hand.<sup>3,4,5</sup>

→

2) *Patient prone, physician has hands crossed*

The patient is asked to assume a prone position. The physician places the hypothenar eminence of both of his/her hands on the transverse processes of the affected vertebral segments. Approximation of his/her hypothenar eminences is induced such that the vertebral sections in question assume as neutral a position as possible. Upon proper positioning an impulse is created through the physician's weight which is transmitted to the patient via the hypothenar eminence of both hands.<sup>3,4,5</sup> This technique requires direct transmission of force by the physician onto the transverse processes of the thoracic vertebra.

3) *Patient sitting, physician uses hands as fulcrum.*

The patient and the physician are seated side by side on the treatment table looking in opposite directions. The physician reaches with his/her hand closest to the patient across the patient's chest and grasps the shoulder furthest away from him/her. By establishing bodily contact with the patient through the approximation of the upper thoraxes, the physician is able to guide the patient in the desired position. The physician then places his/her hand furthest away from the patient on the vertebral segment affected (note diagnosis is done in the same position). Here the physician manipulates the vertebral section in question via placing his/her thumb and index finger on the transverse processes of the restricted vertebra. The required impulse is created actively by the physician via his/her thumb or index finger against the restriction of the vertebral segment.<sup>6</sup>

4) *Patient supine, physician standing at the top of the table.*

The patient is asked to assume a supine position with hands clasped behind neck and elbows lying flat on the table. The physician standing at

the head of the table places his/her thigh under the patient's thoracic spine at the affected segment. The physician then firmly grasps the patient's lateral ribcage with both hands. In this technique the physician creates traction along the thoracic spine, while simultaneously using his/her knee as a fulcrum at the restricted segment. The impulse is introduced through increasing the force of traction created by the physician through backward leaning.<sup>4,5,6</sup>

5) *Patient sitting, physician uses knee as fulcrum.*

The patient is seated and the physician stands behind the patient. The physician places his/her knee at the level of the lesioned transverse process. The patient is instructed to clasp his/her hands behind the neck. The physician then passes his/her hand beneath the patient's axillae and grasps the patient's dorsal wrists. The spinal column is then rotated, side-bent, and flexed/extended until the restricted barrier is engaged. The corrective force is then applied as a thrust through the physician's knee and an upward force through the physician's arms. This technique utilizes the physician's knee as a fulcrum. At the same time minor traction is introduced into the thoracic spine.<sup>3,4,5,6</sup>

6) *Physician standing, patient sitting.*

The patient is seated with his/her back towards the physician, who is standing. The patient clasps the hands behind the neck. The physician places a pillow or book over his/her epigastrium at the level of the affected vertebra. The physician has meanwhile passed his/her hands beneath the patient's axillae and grasped the back of the patient's wrists. Having flexed, rotated, and side-bent the patient to localize the affected region onto the vertebra above the level of contact of the pillow/book with the patient's spine, the physician then applies a quick rotatory force in the opposite

direction of ease of rotatory motion. A slight simultaneous anterior thrust from the physician's epigastrium will facilitate the correction. This technique can be used to correct vertebral dysfunctions involving flexion, rotation and lateral flexion of vertebral bodies.<sup>7</sup>

*Note: The above listed techniques represent only a fraction of the multitude of techniques employed in osteopathic medicine. Please consult the references noted for a more complete list of osteopathic manipulative treatments of the thoracic spine.*

## **Persian Alternative to Present Techniques: Standing HVLA of the thoracic spine**

### *Diagnosis*

The patient can be examined in the position of comfort, which may be prone, supine, or standing. The operator palpates the individual vertebrae for rubor, dolor, calor, tumor, integrity of vertebrae and intervertebral discs, and passive/active range of motion. Here the operator relies primarily on palpatory skills for the determination of the segment and type of dysfunction present. Complex dysfunctions involving flexion, rotation and side bending of one or several vertebral segments can be addressed.

### *Application*

Lower cervical, upper thoracic and mid thoracic dysfunctions (complexes).

### *Condition*

Consider a condition wherein the 4th thoracic vertebra has been found to be altered on the 5th, in flexion with rotation to the right.

→



## Method

### Patient's Position: Standing

Operator's Position: Standing, facing the patient's back with knees slightly bent and shoulders at the same horizontal level as the patient's. When necessary, this can be achieved through standing on a stable elevation such as a footstool.

### Technique

a. The patient places clasped hands behind the neck, palms facing anteriorly and approximates the elbows close to the chest and to each other. Thus, the patient is forward bending the neck onto the chest.

b. The operator grasps his/her left hand with the right wrist, creating a ring composed of the operator's arms and chest. This ring is placed from above around the patient's shoulders and bent arms, thus creating a lock around the thorax and upper extremities of the patient (Figure 1). Note that at this point the patient and the operator are in close bodily contact. The desired rotation, side-bending, and flexion/extension required can now be introduced by the operator through passive positioning of the patient's torso via motion of the operator's torso, for the two are now moving in unison. Thus, in this case the operator rotates to the left and extends his/her torso to engage the restrictive barrier. The operator determines that engagement of the restrictive barrier has occurred through perception thereof via his/her chest wall.

c. The operator then pulls on his/her right arm with the left arm, reducing the size of the ring created and locking the patient within. At the same time, the patient is lifted passively from the ground through straightening of the legs of the operator (and backward bending at the lumbar region, if required) (Figure 2). The isolation of desired segments has already been achieved through positioning and is now realized through

maintaining the position when introducing the tractional element.

d. The operator now exerts a rapid impulse through the patient's arms via a momentary increase in the pull created by the left arm. This force travels from the patient's elbows into his/her scapula, onto the dorsal aspect of the ribcage and into the desired vertebra (e). Upon completion of the corrective impulse the patient is then slowly returned to the erect position.

Note: The individual operator might find modifications such as standing on an elevated level or changing the grip position from the right hand to the left hand beneficial. As such the operator can customize the technique according to personal

and patient needs. It should be noted that at no point is the operator to exert any direct or indirect force on the anterior chest wall. It is recommended that the patient be instructed to exhale prior to the application of the corrective thrust but this is not necessary and does not affect the efficacy of the treatment. Further, minimal impulse is required for correction since positioning and initial lift (traction) will in most cases lead to a resolution of the restrictive barrier engaged.

## Discussion:

Standing treatment techniques have been part of the osteopathic tradition since its founding by Dr. An-

Figure 1



Standing HVLA of the Thoracic Spine: Position of operator and patient prior to the exertion of the corrective thrust.

Figure 2



Standing HVLA of the Thoracic Spine: Position of operator and patient at the time of the exertion of the corrective thrust.

drew Taylor Still. This is documented in a motion picture, in which Dr. Still is depicted demonstrating a manipulative technique in which he and the patient are standing. Thus the utilization of standing techniques for the treatment of somatic dysfunction involving the spine has long been part of the osteopathic treatment repertoire. The above mentioned techniques can be used interchangeably and are often utilized to address the same type of dysfunctions. The determining factor for the utilization of one or the other technique is often based on individual preference of the physician. The Persian variation greatly resembles existing osteopathic techniques but distinguishes itself through exerting negligible compressive force on the anterior ribcage and vertebral column. An obvious disadvantage of the Persian technique is the fact that a certain physical compatibility between the patient and the physician is needed in order to obtain the full therapeutic benefits that this technique can offer. Also, the ability to precisely localize the corrective impulse to the desired vertebral segment via proper positioning and monitoring through one's chest wall will only come with extensive practice. Thus, this technique requires a high level of skill and experience.

Consider, for example, the manipulation of the thoracic spine of a patient who has recently undergone median sternotomy. This situation favors a manipulative method that does not involve the transfer of the corrective impulse through the rib cage. In the Persian tradition these patients are commonly treated using the standing high-velocity low-amplitude (HVLA) of the thoracic spine, for this technique has the advantage of minimizing the exertion of compressive forces onto the anterior rib cage and vertebral column. The standing HVLA of the thoracic spine was recently employed on the author's

grandmother who is 72 years old. She underwent a mitral valve replacement due to a congenital defect 2 years ago. She is very hesitant when it comes to the manipulation of her spine due to her recent sternotomy. Through the use of the Persian thoracic HVLA technique the patient's vertebral somatic dysfunction could be treated without causing her any apprehension or discomfort. Potential hazards that must be considered when performing this technique include reflex bradycardia through stimulation of the vagus nerve and the possibility of fractures in cases of a preexisting bone disease. It should be noted that this technique is only used when less assertive methods have failed to improve the patient's condition.

The multitude of techniques available to the osteopath physician enables him/her to customize his/her therapy based on the patient needs. This opportunity is unique to osteopathic practitioners and is not seen in other branches of today's healing arts.

### Conclusions:

The standing HVLA technique of the thoracic spine described here can benefit the osteopathic physician in his/her treatment of some patients who present with thoracic spine dysfunctions. The physician can utilize this technique when confronted with a patient for whom other manipulative techniques of the thoracic spine are not available due to specific medical conditions. The ultimate efficacy of this manipulative technique lies in the hands of the osteopathic physician and his/her manipulative skills. However, the most important aspect of every treatment remains accurate diagnosis.

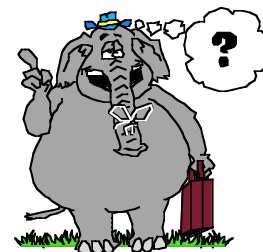
### References:

1. Bourdillon JF: Spinal Manipulation. William Heinemann Medical Books Limited, London. Third edition, 1982.
2. Basmajian JV: Manipulation, Traction and Massage. Williams & Wilkins, Baltimore.

Third edition, 1985.

3. DiGiovanna EL, Schiowitz S: An Osteopathic Approach to Diagnosis and Treatment. Lippincott- Raven, Philadelphia/ New York. Second edition, 1997.
4. Greenman PE: Principles of Manual Medicine. Williams & Wilkins, Baltimore. Second edition, 1996.
5. High-Velocity Low-Amplitude Thrust Techniques; Kappler RE, Jones III JM. In Foundations for Osteopathic Medicine; Robert C. Ward, executive editor. American Osteopathic Association. Williams & Wilkins, Baltimore. 1997.
6. Somatic Dysfunction Principles of Manipulative Treatment and Illustrative Procedures for Specific Joint Mobilization; Paul E. Kimberly, editor. Kirksville College of Osteopathic Medicine. Department of Osteopathic Theory and Methods, Kirksville. Third edition, 1980.
7. William J. Walton: Textbook of Osteopathic Diagnosis and Technique procedures by Chicago College of Osteopathic Medicine. Second Edition, 1970. □

Please address all correspondence and requests for reprints to:  
 Mohammad Namazian  
 2065 Ellis Street, Apt. 4



**Remember!**  
**Support the**  
**American Academy**  
**of Osteopathy and**  
**Register at the**  
**AOA Convention**  
**as an AAO Member**



## AOA CONVENTION - 2000

OCTOBER 29 – NOVEMBER 2, 2000

ORLANDO, FL

# AAO PROGRAM

## “ENHANCING THE HEALTH OF WOMEN IN THE 21ST CENTURY”

JOHN E. BALMER, DO, PROGRAM CHAIRPERSON

### Program Description:

A segment of the American Osteopathic Association Convention, this course provides didactic and practical sessions focusing on osteopathic treatment of women

### Learning Objectives:

At the end of this session, participants should:

- Have reviewed functional anatomy and physiology specific to the treatment of the female patient
- Have practiced techniques specific to the treatment of the female patient
- Have been exposed to diagnostic and treatment considerations in the pregnant patient and the newborn.
- Have been exposed to diagnostic and treatment considerations for hormonal replacement
- Have been exposed to diagnostic and treatment considerations for the foot and ankle

### Hotel Information:

Registration materials will be published in the *Journal of the American Osteopathic Association (JAOA)* and *The DO* magazine early Summer 2000.

# AAO PROGRAM

## Monday, October 30

8:00-9:00 am	AOA Opening Session - Keynote Speaker
9:10 am	Welcome: John E. Balmer, DO, Program Chair
9:15-10:30 am	<i>The Osteopathic Treatment of Women &amp; Children</i> – Stephany Esper, DO
10:30-11:45 am	<i>Preventative Health Care for Women</i> – Karen Nichols, DO
11:45-12:45 pm	<i>T. L. Northup Memorial Lecture</i> Michael L. Kuchera, DO, FAAO
12:45-1:15 pm	Pharmaceutical Update/Exhibits
1:15-2:30 pm	Alumni Luncheons
2:30-3:00 pm	Pharmaceutical Update/Exhibits

### Osteopathic Considerations in Dysmenhorrea

3:00-5:00 pm	Dysmenhorrea (Lecture and Lab) – Timothy J. Barrett, DO
--------------	--

## Tuesday, October 31

### Osteopathic Considerations in Obstetrics

8:00-9:00 am	<i>Anatomy and Physiology – The pelvis and reproductive organs</i> – Wayne Krueger, PhD
9:00-10:00 am	<i>Family Centered Birthing</i> (Lecture and Lab) – Kenneth Johnson, DO
10:00-11:00 am	<i>Prenatal Care</i> (Lecture and Lab) – Melicien Tettambel, DO, FAAO

11:00-12:00 nn	<i>Labor and Delivery</i> (Lecture and Lab) – Melicien Tettambel, DO, FAAO
12:00-1:15 pm	Lunch
1:15-2:00 pm	Pharmaceutical Updates/Exhibits

### Osteopathic Considerations of the Foot

2:00-3:00 pm	<i>Anatomy and Physiology of the foot</i> – Wayne Krueger, PhD
3:00-4:00 pm	<i>Guide to choosing footwear</i> – Walter Ehrenfeuchter, DO, FAAO
4:00-5:00 pm	<i>Treatment of the Foot</i> – Walter Ehrenfeuchter, DO, FAAO

## Wednesday, November 1

### Hormonal Considerations

8:00-9:00 am	<i>Premenopausal Hormonal Considerations</i> – Mark Cantieri, DO, FAAO
9:00-10:00 am	<i>Menopausal Hormonal Considerations</i> – Eileen DiGiovanna, DO, FAAO
11:00-12:00 noon	<i>Codin/Reimbursement Update</i> – Judith A. O’Connell, DO, FAAO
12:00-1:15 pm	Lunch Break
1:15-2:00 pm	Pharmaceutical Update
2:00-3:30 pm	<i>Treatment of Newborns</i> – Jane Carreiro, DO
3:30-5:00 pm	<i>Treatment of Adolescents</i> – Robert Irvin, DO

ADDRESS CORRECTION AND  
FORWARDING REQUESTED

# Have you ordered your copies?

## *Bioelectric Fascial Activation and Release*

The Physician's Guide to Hunting with Dr. Still

By Judith A. O'Connell, DO, FAAO

*"I am satisfied that Osteopathy is my healing system. It is through Osteopathy's tenets that I am anchored and directed. I am at home here with Dr. Still as my constant and never failing companion. I found that Dr. Still, with his founding of Osteopathy as a distinct profession, was not only a revolutionary but a patient advocate as well. He wished to give to the world a better, more complete system of healing that respected the body's unity of systems; understood the individual's ability to heal; and acknowledged the importance of the musculoskeletal system as a predictor and component of diagnosis and treatment. All that I read and all that I learned led me back to Dr. Still. This is why this text uses the teachings of Dr. Still as it's foundation."*

Judith A. O'Connell, DO, FAAO

## *Applications of a Rediscovered Technique of Andrew Taylor Still, MD*

By Richard L. Van Buskirk, DO, FAAO

*"These explorations into the Still Technique have given the author a new and deeper respect for the talents and knowledge of the 'old doctor' who founded osteopathic medicine. Dr. Still had a lot of courage and conviction to have developed such an elegant technique and, then to refuse to let it be disseminated as part of the fundamentals of osteopathy. Quite obviously, Dr. Still felt that the core of the osteopathic profession would lie in its underlying principles and would be strengthened by the diversity of its practice. The price was the loss of a technique that took over twenty years of study and trial to develop. The author feels fortunate, indeed, to have had a hand in its rediscovery and redevelopment. All who find this technique to their satisfaction should take it as presented and develop it further to the betterment of the osteopathic profession and its ability to promote healing."*

Richard L. Van Buskirk, DO, FAAO

### Order Information:

\_\_\_\_\_ *Bioelectric Fascial Activation and Release*

@ \$40.00 + \$6 S/H in U.S.

\_\_\_\_\_ *The Still Technique Manual* @ \$40.00 + \$6 S.H in U.S.

**(NOTE: Please add \$1.00 for each additional book ordered.)**

Total \$ amount of order: \_\_\_\_\_

### Shipping Information:

Name \_\_\_\_\_

Street Address \_\_\_\_\_

(NO P.O. Box #s)

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_

### Payment Information:

\_\_\_\_\_ Check enclosed

\_\_\_\_\_ Charge my credit card

VISA OR  MASTERCARD

Cardholder's Name \_\_\_\_\_

Card No. \_\_\_\_\_

Expiration Date \_\_\_\_\_

For your copies, contact:

**American Academy of Osteopathy®, 3500 DePauw Blvd.,  
Suite 1080, Indianapolis, IN 46268-1136;  
phone: (317) 879-1881; FAX: (317) 879-0563**